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Solid Waste Information and Tracking System Software Requirements Specification

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Project Hanford Management Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200

Fluor Hanford

P.O. Box 1000

Richland, Washington

Solid Waste Information and Tracking System Software Requirements Specification

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Prepared for the U.S. Department of Energy
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Key Words: Solid Waste; client server; inventory systems

Abstract: The Software Requirements Specification for SWITS defines the functions that SWITS will perform after conversion to a client/server architecture.

**SOLID WASTE INFORMATION AND TRACKING SYSTEM
(SWITS)**

**SOFTWARE REQUIREMENTS SPECIFICATION
(SRS)**

Prepared by

LOCKHEED MARTIN
Services, Inc.

March 2000

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1. INTRODUCTION

1.1 PURPOSE

This document is the primary document establishing requirements for the Solid Waste Information and Tracking System (SWITS) as it is converted to a client-server architecture. The purpose is to provide the customer and the performing organizations with the requirements for the SWITS in the new environment.

1.2 SCOPE

This Software Requirement Specification (SRS) describes the system requirements for the SWITS Project, and follows the *PHMC Engineering Requirements, HNF-PRO-1819*, and *Computer Software Quality Assurance Requirements, HNF-PRO-309*, policies. This SRS includes sections on general description, specific requirements, references, appendices, and index.

The SWITS system defined in this document stores information about the solid waste inventory on the Hanford site. Waste is tracked as it is generated, analyzed, shipped, stored, and treated. In addition to inventory reports a number of reports for regulatory agencies are produced.

1.3 OVERVIEW

Section 2, General Description, contains a general description of the product, its environment, its functions, and its users.

Section 3, Specific Requirements, contains the detailed functional requirements for the system.

Section 4, References, contains a list of documents referenced in this document.

1.4 ACRONYMS, ABBREVIATIONS, AND DEFINITIONS

Table 1. Acronyms and Abbreviations

CAS	Chemical Abstract Services
CFR	Code of Federal Regulations
CIN	Container Identification Number
CMP	Container Management Program
CPPM	Computer Protection Program Manager

DCR	Data Change Request
DFD	Data Flow Diagram
DOE	United States Department of Energy
DOE-HQ	United States Department of Energy, Headquarters, Washington D.C.
DOE-RL	United States Department of Energy, Richland Operations Office
DOT	United State Department of Transportation
EPA	United States Environmental Protection Agency
ERD	Entity-relationship Diagram
ESOE	End-user Standard Operating Environment
FH	Fluor Hanford
GUI	Graphical User Interface
HLAN	Hanford Local Area Network
LCO	Limit Condition of Operation
LLW	Low Level Waste
LMSI	Lockheed Martin Services, Inc.
LOV	List of Values
MSDS	Material Safety Data Sheets
OSB	Operations Safety Basis
PES	Performance Evaluation System
PC	Personal Computer
PCB	PolyChlorinated Biphenyl
PIN	Product Identification Number
RCRA	Resource Conservation and Recovery Act of 1976
RIDS	Record Inventory Disposition Schedule
RMIS	Records Management Inventory System
SCR	Software Change Request
SD&I	Software Development and Integration
SWEA	Solid Waste Engineering Analysis
SWITS	Solid Waste Information and Tracking System

SWO	Solid Waste Operations
TRU	Trans-Uranic Waste
TSCA	Toxic Substances Control Act of 1976
TSD	Treatment, Storage, Disposal facility
UHC	Underlying Hazardous Constituent
URL	Uniform Resource Locator
WIPP	Waste Isolation Pilot Plant
WRM	Waste Management Representative
WRAP	Waste Receiving and Packaging facility
WDOE	State of Washington Department of Ecology
WMH	Waste Management Federal Services of Hanford

Table 2. Definitions

Acceptance Criteria	Acceptance criteria are formally specified limits placed on characteristics of an item, process, or service defined in codes, standards, or other requirement documents.
Computer Protection Program Manager	A Computer Protection Program Manager (CPPM) is the individual responsible for assuring that computer usage follows DOE notice N 205.1, <i>Unclassified Computer Security Program</i> .
Configuration Data	Configuration data are data that define the characteristics and state of an entity. Configuration data are not measured values. Examples of configuration data are facility names, storage locations, and container sizes.
Context Diagram	A context diagram is a drawing that shows the boundaries of a system and the interfaces associated with the system.
Data Flow Diagram	A data flow diagram (DFD) is a figure, following a certain style, that displays data movement and processing of a system.
Data Traceability	Data traceability is the ability to know where and how a datum element was obtained, processed, and stored.
Department of Energy	The Department of Energy (DOE) is the United States agency responsible for the oversight of operations at the Hanford Site.
Entity	An entity is a person, place, thing, or concept that has characteristics (or attributes) of interest to the enterprise.

Entity-Relationship Diagram	An entity-relationship diagram (ERD) is a figure, following a certain style, that displays business entities and their relationships with each other. ERDs are used to explain the business model of a (proposed) computer system.
Environmental Protection Agency	The Environmental Protection Agency is the United States agency responsible for ensuring that the federal regulations on the environment are adhered to.
Graphical User Interface	A Graphical User Interface (GUI) is a form of communication between users and computers that uses graphics-oriented software, such as windows, menus, and icons, to facilitate the interaction.
Hanford Local Area Network	The Hanford Local Area Network (HLAN) is a local area network on the Hanford Site.
Lockheed Martin Services, Inc.	Lockheed Martin Services, Inc. (LMSI) is a subcontractor to the Project Hanford management Contractors. LMSI performs the software development and integration tasks for the Hanford site.
Move (a container)	To relocate a container from one place to another without using shipping papers. Often used when a TSD moves a container from one facility to another. Contrast with Ship (a container).
Quality Assurance	Quality Assurance (QA) is the systematic actions necessary to provide adequate confidence that a material, component, system, process, or facility performs satisfactorily, or as planned in service.
PeopleCore	Hanford site database of information about employees at the Hanford site. A source of information about people who use SWITS.
Remote Access	Remote access is access via HLAN to a computer system.
Report	A report is a formatted output usually produced using data from a database. A report may appear on-screen, on paper, or in a computer file.
Ship (a container)	To relocate a container from one place to another and documenting the move on formal shipping papers. Often used by generators to ship waste to a TSD, or to move waste from offsite to on-site.
Systems Development and Integration	Systems Development and Integration (SD&I) is an organization of LMSI that provides support and personnel for development and maintenance of information and scientific computer systems.
Traceability	Traceability is the ability to trace the history, application, or location of an item and like items or activities by means of recorded identification.
Trigger	In relational databases: a type of stored procedure that is executed automatically when a user attempts a specified modification statement on a specified table. GUI Input forms may also contain trigger code that is executed when a certain event occurs.

Washington State
Department of
Ecology

The Washington State Department of Ecology is the state agency responsible for assuring that Washington State regulations are adhered to by the Hanford Site.

2. GENERAL DESCRIPTION

2.1 PRODUCT PERSPECTIVE

The SWITS was initiated to centralize and automate storage of information about dangerous, radioactive, and PCB-containing waste. It helps track waste from cradle to grave in line with current regulatory philosophy.

2.1.1 SCOPE OF SWITS SYSTEM

The scope of the SWITS is shown in the context diagram of Figure 1; a context diagram depicting the physical interfaces to external systems. Everything within the central circle is part of the SWITS system that this project may modify. The boxes on the outside represent the providers and users of data and reports. The boxes on the outside are elements that the project may not modify. The arrows show the direction of data flow between the SWITS system and the external entities.

Figure 1. SWITS Context Diagram

2.2 PRODUCT FUNCTIONS

The SWITS will perform the following functions:

- Receive and report information about waste – where it was created, who owns it, where it is located.
- Receive and report information about waste movements and shipments.
- Receive and report information about waste storage and treatment facilities.
- Record verification activities performed.
- Store configuration data about waste types, organizations, etc.

Detailed information on functional requirements is provided in Section 3.1.

2.2.1 PROCESS DESCRIPTIONS

The typical cycle for waste created at Hanford is:

- Container procurement by the waste generator.
- Defining the waste to go in the container.
- Filling the container.
- Finishing waste definition.
- Shipping the waste to a treatment/storage/disposal (TSD) facility.
- Acceptance of the waste at a TSD.
- Tracking the waste until final treatment or disposal.

However, the data for these processes may be entered at almost any time, and corrected at any time. The SWITS processes do not lend themselves to solid data-flow diagrams. Instead, data-flows are an indication of one of the ways that data for SWITS may be entered.

2.2.2 PROVIDER/USER DESCRIPTIONS

The following users appear in the context diagram in Figure 1. They provide and use data coming to and from the SWITS.

Hanford PeopleCore provides a list of the people currently employed at Hanford. It is used to update the PERSON table with current location, name, and telephone number information.

RADCALC is the DOT approved calculator for DOT classifications used when waste is shipped on public roads. This system reads isotopic and other information from the SWITS database to perform its calculations.

SWEA is the Solid Waste Engineering Analysis program used to determine the designation to be applied to solid waste. It reads from and writes to SWITS.

WRAP DMS is the database system used in WRAP. When waste is shipped to WRAP the details are read from SWITS by DMS. After processing, information is written back to SWITS.

PES is the Performance Evaluation System database that plans the verification activities that must be performed on solid waste items created on site and accepted for TSD from offsite. PES needs to read the SWITS database to track the activities that have been performed.

Human User refers to the people who enter or retrieve data from the SWITS system.

There is a bar code scanner interface to SWITS that is not detailed here. Any function that can be performed on a bar code scanner can be performed by a form. The detailed requirements for the bar code interface are described in *SWITS C/S Conversion Bar Code Requirements Specification*, HNF-5866.

2.2.3 USER ROLE DEFINITIONS

Each role in SWITS has access to a defined set of functions and data elements. An individual SWITS user will have one or more SWITS roles. The relation between the role and the function is listed in section 3.1. The user roles are defined below.

CHARGE CODE MANAGEMENT role

Responsible for maintaining valid charge codes in SWITS.

Responsible for tracking volume and types of waste received.

Currently performed by Waste Management organization..

CONTAINER MANAGEMENT role

Creates empty containers

Assigns DOT container specs, etc., to new containers.

Limited access to SWITS.

FULL READ ONLY role

Has access to most of SWITS but is not permitted to change things.

Can perform queries and run reports.

Cannot set the Verification or Billing functions.

Plan to give all SWITS users read-only access + other roles as necessary.

GENERATOR role

Initial data entry for container

Waste records locked when Request to Ship Flag = 'Y'

Restrict access to specified generator group(s)

Completes Designation and LDR data entry for container

Performs repackaging

Assigns profile to container

May assign DOT information to container

SHIPPING COORDINATOR role

Shipping coordinator.

Responsible for preparing shipping documents for material moved on site or off site.

The Shipping Coordinator privilege is limited by the generator groups the SCO is associated with. In other words, an SCO may act as a shipping coordinator only for packages that the SCO is personally associated with.

A person may be associated with all generator groups.

This function will be used more if (when) some Generators move into the SCO function.

SWITS ADMINISTRATION role

This person administers the SWITS system.

Can perform all the actions that any user can plus has full permission to modify data in the maintenance (lookup) tables.

TSD MANAGEMENT role

The management of the TSD. Has the privileges of the TSD OPERATIONS role plus can request that waste at a TSD be shipped from the TSD.

TSD OPERATIONS role

Receive and relocate waste at TSD.

Use barcode application.

The TSD may generate waste of its own. In that case, they would be given the GENERATOR role.

TSD REPRESENTATIVE role

Access to all records regardless of status or generator group.

Review packages in Request_to_Ship=1 status (old "E" status).

Capable of modifying records for generators.

Review and approve containers for receipt/acceptance.

VERIFICATION role

Perform surveillances; review shipments and flag containers for verification; perform verification.

Record this information in SWITS.

WMR role

Waste Management Representative. A representative of Waste Services usually located at the customer site who has GENERATOR privileges and some TSD REPRESENTATIVE privileges. The purpose of this role is to facilitate the movement of waste from the generator to the TSD.

2.3 DATA SOURCE AND FREQUENCY DESCRIPTION

Data are entered manually through the GUI every day. Typically there are no more than 30 simultaneous users on the system. Data from bar code scanners is also accepted through the GUI. Bar code requirements are listed in *SWITS C/S Conversion Bar Code Requirements Specification, HNF-5866*.

2.4 GENERAL CONSTRAINTS

2.4.1 REGULATORY POLICIES

The customer is responsible for determining which regulatory policies apply to the SWITS data. Depending on the chemical and physical composition of the waste different regulations apply. Types of waste and the applicable regulations are:

- Resource Conservation and Recovery Act of 1976 (RCRA) - 40 CFR 260 to 281
- Washington State Department of Ecology Dangerous Waste Regulations - WAC 173-303
- Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) - 40 CFR 300 to 374
- Toxic Substances Control Act of 1976 (TSCA) - 40 CFR 700 to 766. Locally, PCBs controlled under 761.
- Low Level Waste (LLW) - HNF-EP-0063
- Transuranic Waste (TRU) - HNF-EP-0063

Table 3 URLs for Web Sites with Waste Regulation Information

Document Name or Description	URL
DOE New Series Directives	http://www.explorer.doe.gov:1776/htmls/regs/doe/newserieslist.html
DOE Order 5820.2A download	http://pc-dduncan.anlw.anl.gov/
DOE Order 435.1 Implementation	http://www.hanford.gov/wastemgt/doe/psg/435-1.html
Hanford Site Solid Waste Acceptance Criteria HNF-EP-0063	http://www.hanford.gov/docs/hnf-ep-0063/index.htm
Hanford Site Solid Waste Acceptance Program	http://www.hanford.gov/wastemgt/wac/index.htm
Hazardous Waste 40 CFR 260 Regulated Substance, Management HNF-PRO-451	http://www.access.gpo.gov/nara/cfr/waisidx/40cfrv17.html
Solid Waste Management HNF-PRO-455	http://docs.rl.gov/php/procedures/display3.asp?filename=451r0.asp&path=/procdocs/enviropro/451r0.asp
U.S. DOT 49 CFR	http://docs.rl.gov/php/procedures/display3.asp?filename=455r0.asp&path=/procdocs/enviropro/455r0.asp
U.S. Environmental Protection Agency	http://www.access.gpo.gov/cgi-bin/cfrassemble.cgi?title=199849
Washington State Regulations	http://www.epa.gov
Waste Edits Spreadsheet	http://access.wa.gov/government/awlaws.asp
	\\AP002\SWITSUPD\CS Conversion\Requirements Documents\CCB Approved Requirements\waste_generation.xls

2.4.2 RESOURCE LIMITATIONS

The SWITS system database will run on an HP computer using Oracle™ database software and the HP-UX™ operating system. This computer is shared with other site-wide databases such as ACES and LEMIS.

2.4.3 COST AND SCHEDULE

Cost and schedule are detailed in the *SWITS Client-Server Conversion SPMP, HNF-2357*.

2.4.4 SPECIFIC CUSTOMER DIRECTIONS

2.4.4.1 SWITS TRACKS WASTE, NOT CONTAINERS

Do not modify SWITS to support container tracking separately from waste tracking.

2.4.4.2 USE 2 TRACKING NUMBERS PER CONTAINER

The next SWITS system should continue to use 2 tracking numbers per container. The primary number is unique among primary numbers; the secondary number is unique among the secondary numbers. A primary and secondary number may match. The primary number will be used primarily to track the container; the secondary number will track the contents. (Darlene Hagel 8/19/99)

2.5 USER CHARACTERISTICS

The general user has some familiarity with the MS-Windows environment in which the SWITS GUI will be deployed. Most users will be familiar with only part of the SWITS process – either generation, shipping, or storage/treatment – and will need training on how to use SWITS to support their job. A few users will have general access to SWITS functions and will require training in how to use the many functions of SWITS.

2.6 ASSUMPTIONS AND DEPENDENCIES

2.6.1 HARDWARE AND SOFTWARE AVAILABILITY

The general Hanford user uses an IBM™-compatible PC. The PCs that the SWITS users have must support the site-standard software and have sufficient disk space to hold temporary files used for report creation and data transfer. The PCs must connect to HLAN. Users who are not on the HLAN may not have access to SWITS.

The development and production databases for SWITS have been created as of this writing. The assumption is that they will continue to be available during development and production.

2.6.2 DEVELOPER TRAINING

Developers will receive on-the-job, on-site, and off-site training.

* registered trademark of International Business Machines Corporation

2.6.3 EXTERNAL SPREADSHEETS

SWITS does not have to interface with any external spreadsheets. The spreadsheets may interface to the Oracle database without going through SWITS.

2.6.4 NO DIRECT INTERFACE BETWEEN WIPP AND SWITS

The interface between the Hanford site and WIPP is all hard-copy. SWITS will not be adapted to support the shipment of waste to WIPPS in this first SWITS installation.

2.6.5 CONTAINERS NOT REUSED

In the CCB meeting 9/30/99 it was decided by Darlene Hagel and Cindy Stratman that the current SWITS waste model will be kept. In addition, each time a waste container is filled it will get a new container ID. In other words, if a container is moved off site, emptied or processed, and returned, the container will have a new number before it is used again. This will be written into SWITS procedures for the new SWITS.

2.6.6 MSDS WEIGHT PER CENT IN DEFINITE VALUES, NOT RANGES

A CAS number specified in an MSDS may have a range of percentages. A value within this range is chosen by the user for entry into the designation process.

2.6.7 NO MORE PORTFOLIOS

Every process in SWITS will be container-based. The portfolios will go away as a mechanism for grouping items.

3. SPECIFIC REQUIREMENTS

3.1 FUNCTIONAL REQUIREMENTS

3.1.1 MANUAL DATA ENTRY GENERAL REQUIREMENTS

Several requirements apply to all data that are entered by hand.

- Any person who enters a data element will be able to read that data element.
- The system will not allow a situation where a person who has entered data cannot see the data.
- All date and time entries will have their formats checked when the date or time entry is complete. The user will be notified if the format is incorrect.
- For all manually-entered data the SWITS will be able to identify when and by whom the data were entered into the system.
- When a user deletes a record the system will verify with the user that the deletion was intended. The user will have the opportunity to cancel a deletion.

3.1.1.1 DISPLAY ACCUMULATION START DATE

The user needs an obvious way to tell whether the container accumulation date has been set. Often a regulatory clock starts when an accumulation date is associated with a container. The user needs to know if this clock has been started and how long it will be until the time runs out. When the due date is set, display the date near the accumulation date (DL Hagel, 9/23/99)

3.1.1.2 DISPLAY DATETIME

Display the current date and time on the user screens. Change the style of the display so that the customer knows it is a display field, not data entry.

3.1.1.3 DISPLAY LOGIN NAME

Keep the database login string visible on the user screens. Change its style so that the customer knows it is a display field, not data entry.

3.1.1.4 DISPLAY USER NAME

Provide the ability to see the user name, not just the user id, when a user is associated with something in SWITS. For example, when a person has performed a designation, what is the name of the person who did it?

3.1.1.5 DISPLAY OF CURIE VALUES FOR ISOTOPES

Display the isotopic composition of waste in Grams and Curies.

3.1.1.6 AUTOMATIC UPDATE OF CONTAINER LOCATION

Automatically update the container location when related information is filled in. For example, when an RSR accept date is entered or a manifest ship date is entered the location of the shipped item should be updated.

3.1.1.7 ABILITY TO COPY WASTE AND CONTAINER INFORMATION

The user needs a way to copy information from one container to another. A typical case is when several containers will be getting similar waste. The user needs to be able to copy filled fields from one screen to another.

3.1.1.8 SCREEN SYNCHRONIZATION FOR CONTAINERS

When a user is working with multiple screens that have information about the same container have the system automatically select the container for succeeding screens.

3.1.1.9 REPORT VIEWING ON SCREEN

Need the ability to view reports on-screen and printed.

3.1.2 CONTAINER MANAGEMENT**Description**

Requirements for Container Management Program (CMP) to be implemented in C/S version of SWITS.

Implement modified CMP without store orders -

- remove ownership of empty containers
- barcodes labels and CIN numbers continue to be assigned by CMP
- no SWITS store orders

Store Order requests for empty waste containers from SWS will no longer be supported by SWITS. Business process changes must be communicated to Generators, SWS and TSD personnel. Changes may be requested to address problems with the Passport Store Orders. Currently, Passport will lock containers in CMP inventory when the store order is completed eliminating the ability to actively manage the inventory.

Container ownership will no longer be assigned or tracked at the SWS warehouse; it will be assigned and tracked in SWITS starting when a generator receives (enters) a drum into SWITS.

SWS inventory will no longer be tracked in SWITS/CMP. SWS inventory will be maintained in the Passport system.

Functions deleted:

- data entry - Store Order/Request Information - SWIS521
Store Stock Number Information - SWIS523
- barcode - CMP Ship to Generator - BAR M200.2 and related SWIR559 report
CMP Inventory - BAR M200.3 and related SWIR560 report
- reports - Empty Container Custodian Report - SWIR520
Site Warehousing Services Status - SWIR521
Store Stock Number Table - SWIR523
Container Management Program Store Order - SWIR524

Entities deleted:

- Store Request - STOREREQ
- Store Request Detail - STOREDETAIL
- Store Stock Number - STORESTOCK

Attributes deleted from CINVENTORY entity:

CIN_CNTR_USAGE - Used to identify the usage status of a container. Examples of status are:

- 1) Impact Level 3 Spec-Available for waste as designed-green tagged
- 2) Impact Level 4 Spec-Available for waste as designed-white tagged
- 3) Nonspec-Not available for waste as designed
- 4) Damaged/Used-Not to be used as a waste container
- 5) Container destroyed.

CIN_GEN_ACCEPT_DT - The date that the container was accepted by the customer.

CIN_GGRP_ID - The group or custodian of a container. Identifies who a container is assigned to.

CIN_SRFILLED_DT - Date that a container is used to fill a store order.

SWIS520 Maintain New Container Inventory Screen**Description**

The Container Management Program (CMP) screen is used to view, populate and update the Container ID Number Inventory. The CMP screen allows tracking of containers that are destined to be used as waste containers (new containers) sold to waste generators.

Two special functions support mass inserts and mass updates to the Container ID Number Inventory. This provides keyboard capability duplicating the CMP barcode function (reference CMP Receive barcode function) as well as special one-time updates or inserts.

Business users: CONTAINER MANAGEMENT

SWIS522 Maintain Purchase Order Information Screen**Description**

Tracks / maintains Purchase Order information relating to the acquisition of new waste containers.

Notes

Resolved Problem Area(s) -

Customer requested the ability to track container test summary in SWITS for a purchase order/item no. 8/19/99 CCB Review - Proposed solution is to implement the PO revision number as a third identifier. This solution presumes that any changes in the construction of the container, test summaries or assembly instructions results in a revision to the container specification and, in turn, a revision to the purchase order. Purchase Order revisions will need to be maintained in SWITS CMP. The CMP receive processing will need to altered to record the PO revision in addition to the PO/PO Item. The combination of PO, PO Revision and PO Item will provide accurate tare weights for containers received by generators and, potentially, the traceability into the RMIS system for retrieval of the container test summaries and assembly instructions.

8/31/99 - Added PO_REL_NUM to PURORDER entity. Reference PURORDER entity notes regarding conversion of existing data.

User training will need to cover changes in CMP Receive process. Jim and Larry will need to set up PO Releases for each shipment from vendor. Each release will vary in number of items. Today a blanket order is established once and used for receiving many shipments from a vendor over a period of months or years. (Note 1/29/00 – An field has been added to the CINVENTORY table to allow Jim to track individual shipments on an open P.O.)

Business users: CONTAINER MANAGEMENT

3.1.3 ENTER WASTE GENERATOR DATA**GEN_1.0 Waste Generation****Description**

Generation is the creation of hazardous waste

Notes

Once a container is created the processes can happen in about any order. The only truth is that the waste package must pass the shipping edits before it can be shipped. This function is the base menu for the generator screens.

The waste may be designated before the container is closed.

3.1.3.1 Treatment of Waste by Generator

Generators may treat waste to make it less hazardous before or after the waste is formally defined in SWITS. The customer wants to keep record any waste treated to get state credit for recycling or reducing the waste generated at the Hanford site.

GEN_1.21 Create a GEN Waste Treatment Record Screen

Description

Function to capture the quantity, stream code, treatment method, designation code and DW numbers of a generator treated waste for later display on the Annual Dangerous Waste Report (ADWR). The treated waste ID may or may not "live on" as a SWITS waste package. This function was copied from TSD_8.02.

Notes

Treatment information will be entered manually, and may be for either packaged or uncontainerized wastes. This function duplicates the existing functionality and purpose of the UNCONTAIN table.

GEN_1.21.01 Extract Data from Waste Table

Description

Function to copy a waste package and its dangerous waste numbers to the treatment table. The relationship with the WASTE table is lost, allowing the copied record(s) to be subsequently edited without affecting the original. This step is optional for a Generator, as the treated waste may not exist as a SWITS waste package.

GEN_1.21.02 Record Treatments

Generator waste may be treated using multiple treatment codes.

Notes

The reporting requirements are that only the original treatment and original volume of the waste need be reported on the ADWR. In other words, 40 l of nitric acid may be neutralized - this is reported. The 42 l of resulting waste are treated to remove the nitrate, then dried, and the 1.2 l of residue is shipped off. To the regulators there were only 40 l of waste treated.

However, for our internal records, they want to know all of the treatments that were performed on the waste. Some of waste is treated before it is formally declared in SWITS - Darlene Hagel wants the site to take credit for that, too.

3.1.3.2 Waste Generation

GEN_1.25 Maintain a Waste package Screen

Description

This is the complete data entry requirements to track waste in SWITS. The waste data elements cover RCRA, TSCA, WAC, LLW and TRU requirements as well as optional data.

Notes

This function contains the functions used by a generator to enter, maintain, edit, and mark for shipment the waste record.

The following is the selection criteria that will be used to display the appropriate fields:

CON_DANG_FLAG
CON_CERCLA_FLAG
CON_TSCA_FLAG
CON_RAD_CD

This screen needs a button to invoke the waste edits.

SWITS ADM role must be allowed to change the generator group assigned to a container.

A user may be a member of more than one generator group. When the container is created in SWITS and the creator is associated with more than 1 generator group, the user must tell SWITS which generator group is associated with the container. If the user is associated with only 1 group the association is automatic.

The generator group is permanently fixed on the container when the CON_AVAILABLE flag is set to In Use. If the user is a member of more than 1 generator group when this event occurs the user must choose which Generator Group owns the waste.

Note: The In Use flag may be set explicitly when the container is received. The In Use flag is set implicitly whenever the generator does something that implies that the generator knows what will be in the container. Examples: associating a Stream code with the container, a DW number, waste components, etc., will set the In Use flag.

Business Users: GENERATOR, WMR

GEN_1.25.1 Enter minimum required items to create a waste package in SWITS

Description

Minimum items to define a package include the primary package ID, generating group, container status (empty, available), waste status, type of owner, and location (facility). These minimum requirements are for empty containers or waste with no regulations applied.

Notes

A user may be a member of more than one generator group. When the container is created in SWITS and the creator is associated with more than 1 generator group, the user must tell SWITS which generator group is associated with the container. If the user is associated with only 1 group the association is automatic.

When an empty waste container is created it normally has the CON_AVAILABLE flag set to Available. The user has the ability to mark a container as In Use on any empty container thus associating the user's generator group with the container and making it difficult for another generator group to use the container.

GEN_1.25.1.1 Create a Waste Record using a Screen Screen**Description**

Create a new waste record in SWITS for an empty container using a screen. Unlike the barcode function, the primary ID for the new record can come from either a CMP record, or be defined by the generator; the barcode function only uses CMP records.

Data entered include

- 1) Unique ID
- 2) Optional secondary package ID
- 3) Owner of container (Generator Id)
- 4) Location of Container (Facility / Gen Detail)
- 5) Container Status (default to "AVAILABLE")
- 6) Waste Status (default to "EMPTY")
- 7) Container Type
- 8) Optional Waste Description
- 9) Container Owner Type (default to owner type implied by Generator ID)

In addition the user needs the ability to override the Container Status default, e.g.

- (1) Ability to mark container as "in use" (CON_AVAILABLE) even when container is empty.

Note: The Waste Status value will be set whenever any waste is added to the container.

The Unique ID is unique over the range of records in the WASTE table. Currently each generator has their own prefix and uses a sequential suffix. This lessens the chance of assigning duplicate container numbers.

Business users: GENERATOR, WMR

GEN_1.25.1.1.1 Assign primary tracking number**Description**

Assign a tracking number to a container that does not have one.

Generally applies to containers that have not come from CMP, e.g., didn't have a primary tracking number assigned by CMP.

Notes

The primary tracking number must be unique within the WASTE table.

Currently each generator uses their own prefix followed by a sequential number.

GEN_1.25.1.1.2 Create a waste record from CMP

Description

Create a new waste container record in SWITS.

In this case the container was labeled by CMP.

This function will move the CIN# and related information from the CINVENTORY table to the WASTE table. The primary container ID will be a CIN# from the CMP table.

Suggest that the user be able to query/select from the CINVENTORY table to create the WASTE record.

GEN_1.25.1.2 Create a Waste Record using a Barcode Function Screen

Description

Function to create a new waste container record from a CMP record using a barcode scanner.

Notes

This process assumes that the container has been labeled by the CMP process and that the primary ID for the new package exists in the CMP table (CINVENTORY).

Need to identify the Generator Group that takes custody of the container.

Business users: GENERATOR, WMR

GEN_1.25.1.2.1 Generator Barcode Receive / Relocate Report Screen

Description

Report detailing the receipt of new, empty containers at a generator's facility, or movement of generator-controlled waste between facilities or accumulation areas.

Notes

Generator container receive and relocate report, launched from the "process_barscan_recs" UNIX process only when Generator Receive/Relocate type records are processed.

This report has three sections:

Section #1 details the creation of new container records in the WASTE table from CINVENTORY table data.

Section #2 confirms the movement of a container between facilities and / or generator detail locations.

The last section displays containers that (a) did not change locations, (b) belonged to a generator group different from that which processed the records, so no action was taken, or (c) SWITS could not match the package ID scanned, or there was a problem with the package status code, preventing the move.

The generator group must be entered here.

Business users: GENERATOR, WMR

GEN_1.25.10.1 Maintain or update DW Numbers Screen

Description

Relate applicable dangerous waste numbers for this container as determined through designation.

GEN_1.25.15.1 Maintain Generator Specific Data

Description

Each generator group may decide that additional information is required for the waste containers generated by their waste group. These text, y/n, or date fields are available or required for the waste generated by the group. The values for these fields are entered here. Assigning the empty fields to the waste is defined in section 3.1.10

The fields visible to each generator group need not be the same.

A number of columns were removed from the WASTE record as being specific to a generator group.

GEN_1.25.20.1 Associate Waste Components

Description

This is where the constituents of the waste package are entered. This is part of the manual designation process.

GEN_1.25.5 Enter optional waste package information

Description

Generator reviews information from the Waste Inventory Sheet, MSDS and Lab Analysis to determine if enough information is available to designate the waste.

The Generator reviews the Waste Data Sheet to determine if enough information is available to do the RAD classification.

Container is in "G" status after this step. In new terms, the container is still under Generator control after this step.

Enter additional waste information applies to data elements required by Tech Services or Ops that are not regulatory driven.

Notes

This function works for the generators while the generators have control of the container. Once control has passed from the generators the WASTE record is no longer modifiable by the generators; the generators may modify the related, generator-specific fields.

Request from Mandy Pascual to display the thermal power for a container. It has been defined in the Classification FHD.

GEN_1.25.5.1 Maintain Regulations on Waste

Description

This function will allow the user to choose the regulations that apply to this container of waste.

Regulatory choices include Dangerous (RCRA and WAC), TSCA, CERCLA and RAD (TRU, LLW, USG).

Choosing 0-many regulations selects the data elements that must be entered for the waste. The details of which data elements will be shown are in the "waste_generation.xls" spreadsheet located at "\\AP002\SWITSUPD\CS Conversion\Requirements Documents\CCB Approved Requirements."

GEN_1.25.5.1.1 Dangerous Waste (RCRA and WAC)

Description

Defines the data elements required and optional for Hazardous Waste.

According to Darlene Hagel, Hazardous Waste includes waste that is regulated using the RCRA and WAC laws/regulations.

Notes

The clock value for this waste type is stored in the REGCLOCK table. Given the regulations that apply to waste the REG CLOCK table can be used to determine the deadline for the waste.

This is a Y, N or N/A field.

GEN_1.25.5.1.1.3 Define Physical Characteristics

Description

This function describes the physical characteristics of the waste. I.e. (flashpoint, ph, ...)

GEN_1.25.5.1.2 CERCLA

Description

This displays the data elements required and optional for waste to which the CERCLA regulations apply.

Notes

Given the regulations that apply to waste the REG CLOCK table can be used to determine the deadline for the waste.

This is a Y/N field.

GEN_1.25.5.1.3 RAD Waste (LLW or TRU)

Description

The generator determines that the waste is RAD, either LLW or TRU based on process knowledge. This initial determination can be later changed based on the outcome(s) of various SWITS calculations once RAD isotope data is entered.

Notes

Given the regulations that apply to waste the REG CLOCK table can be used to determine the deadline for the waste.

This is a Y/N field

GEN_1.25.5.1.3.1 Perform Rad Calculations

The user may perform calculations to help determine the radioactive category for the waste. Details are in section 3.1.9.

GEN_1.25.5.1.4 PCB Waste (TSCA)

Description

Is this waste regulated under the Toxic Substances Control Act, e.g., does the waste contain PCBs?

If this regulation is selected to apply then an accumulation date must be set at the same time.

Some PCB data must be entered at the start of waste tracking. T. Hexum 10/15/99

Notes

Given the regulations that apply to waste the REG CLOCK table can be used to determine the deadline for the waste (bus func GEN_1.25.5.35.1).

If TSCA regulations apply then the accumulation date must be set as soon as you determine that the waste is TSCA.

This function maintains a Y, N field, CON_TSCA_FLAG, in the WASTE record.

GEN_1.25.5.2 Assign Profile to Waste Screen

Description

Assign a Waste package to a Profile. The attachment is made through the WASTE record for the package.

An expired Profile may not be newly assigned to waste.

Note: The Profile is planned to be associated to Waste before the Stream. The Stream association is with the Generator functions now.

Notes

The Waste record also points to WSRd numbers.

The WSRd pointed to by the Waste must match the WSRd pointed to by the Profile.

This can be enforced here or, preferably, in the database.

New waste cannot be assigned to an expired Profile.

Business users: GENERATOR, VERIFICATION, TSD REPRESENTATIVE, WMR

GEN_1.25.5.25 Assign Secondary Tracking Number

Description

The container is identified in SWITS using a unique Package Identification or Container Identification Number (PIN or CIN#). In the original SWITS system, a container may have both a PIN and CIN label.

If the container was available through Container Management then the container will already have a Container Id (CIN). The PIN is a second ID added by the generator.

The secondary id number is assumed to be the waste tracking number. The CIN number should be used to track the container. T.H.10/15/99

Notes

Data needed to Assign a Secondary Tracking number are the same as for creating a container in the first place.

GEN_1.25.5.3 Assign Stream to Waste Screen

Description

Assign a Stream code to a waste package.

The plan is to apply the Profile to the package first.

Then, using the Profile associated with the package, the Streams presented to the user to pick from are limited by the Streams associated with the Profile.

Business users: GENERATOR, WMR, VERIFICATION, TSD REPRESENTATIVE

GEN_1.25.5.35.1 Calc Deadline Date

Description

This function will calculate the deadline date for a container.

This function can be called with any combination of regulations that apply and the accumulation date set or not. It is possible that there will not be sufficient information to set a deadline date - no problem, try again when something changes.

This function will check the REG CLOCK table for a row that matches the regulations that apply to the WASTE record. If a match is found and the accumulation date is set, then use the NO OF DAYS value to set the ship-date clock for the waste. If a matching record is not found, notify the user that the assignment of regulations to the waste is not complete.

Allows them to insert the ACCUM DATE anyway.

Notes

Several Events have been defined that will trigger this function.

GEN_1.25.5.48 Enter Packaging Components**Description**

Enter Waste Packaging Components (does not include hazardous waste components)

Notes

This probably consists of choosing packaging components from the PKGINGCOMP table and deciding how much of each is in the container (the results are in the PKG PKGINGCOMP table).

Notes in the original description (from existing system) of this process says that this function should- could be performed for all waste packages.

GEN_1.25.5.50 Enter (LDR) info for Letter Screen**Description**

Enter the information so that an LDR certification letter can be printed.

Notes

Entering the composition may come from the following:

- 1) SWEA download
- 2) The new designation function may be the replacement (Not implemented this version of SWITS.)
- 3) Manual entry by the generator.

The existing SWITS LDR letter (R353) is run from LDR data stored with each package, while the letter defined for this function is against a designation record. Need clarification on the business rules / regulations for this report. For the first implementation of SWITS the data will only be in SWITS - there is no Designation. So the LDR letter will be written from data for each package.

Business users: GENERATOR, WMR

GEN_1.25.5.50.10 Relate Solvent Data to WASTE Record**Description**

Relate Solvent data to the Waste record.

Used as part of the LDR Letter process.

Notes

Typically the user will define the Waste Components in the waste package before assigning 0-many solvents to the package.

The user may define the solvents in a package either or both of the following ways:

- 1) Select the solvents from a list of all the solvents.
- 2) Select the solvents from a list limited by the waste components already selected.

The user does not enter the quantity of solvent, merely associates it with the package.

In other words, the solvent selection list box may be filled by

- 1) SELECT * from SOLVENT s, WASTECOMP wc where SLV_LOV = 'Y'
and s.CAS# = wc.CAS#

or

- 2) SELECT s.* from SOLVENT s, WASTECOMP wc, PKGWASTECOMP pwc
where pwc.CON_PKG_ID = (current waste record).CON_PKG_ID
and pwc.CAS# = wc.CAS#
and s.CAS# = wc.CAS#.

GEN_1.25.5.50.15 Relate UHC Data to WASTE Record

Description

Relate the UHC records to the Waste record.

Used as part of the LDR Letter process.

Notes

Typically the user will define the Waste Components in the waste package before assigning 0-many Underlying Hazardous Components (UHC) to the package.

The user may define the UHC in a package either or both of the following ways:

- 1) Select the UHC from a list of all the UHCs.
- 2) Select the UHC from a list limited by the waste components already selected.

The user enters the concentration and units of the UHC for the package.

In other words, the UHC selection list box may be filled by

- 1) SELECT * from UHC u, WASTECOMP wc
where wc.WC_LOV = 'Y'
and u.CAS# = wc.CAS#

or

- 2) SELECT u.* from UHC u, WASTECOMP wc, PKGWASTECOMP pwc
where pwc.CON_PKG_ID = (current waste record).CON_PKG_ID

and pwc.CAS# = wc.CAS#
and u.CAS# = wc.CAS#

GEN_1.25.5.50.20 Relate Subcategory Data to WASTE Record

Description

Relate the DW Subcategory to the WASTE Record.

Used as part of the LDR Letter process.

Notes

Typically the user will define the Dangerous Waste Components in the waste package before assigning 0-to-many subcategories to the package.

The user may define the subcategories in a package either or both of the following ways:

- 1) Select the subcategories from a list of all the subcategories.
- 2) Select the subcategories from a list limited by the waste components already selected.

The user enters variance information about the subcategory for the package.

In other words, the subcategories selection list box may be filled by

- 1) `SELECT * from DW_SUBCATEGORY dws`
`where dws.SBC_LOV = 'Y'`

or

- 2) `SELECT u.* from DW_SUBCATEGORY dws, DWNUM d, PKGDW pd`
`where pd.CON_PKG_ID = (current waste record).CON_PKG_ID`
`and pd.DW_NUM = d.DW_NUM`
`and d.SBC_CD = dws.SBC_CD`
`and dws.SBC_LOV = 'Y'`

GEN_1.25.5.50.25 Maintain or update LDR DW Numbers

Description

Relate the Waste Package to the DW Numbers.

Used as part of the LDR Letter process.

Notes

Typically the user will fill in this table after deciding what the waste components are and before assigning the UHC or subcategory information. The DW numbers may be set by the waste stream, too.

The user can select from a list of the Dangerous Waste numbers. The resulting associations are stored in the PKGDW table.

GEN_1.25.6 Change generator group assigned to container**Description**

Occasionally a generator will create waste that they later want to assign to another generator group. (ref Bechtel, Souix Williams). The generator can't re-assign responsibility but can ask the SWITS Administrator to change the generator group for a package. (SWITS CCB, 11/30/99)

Notes

Modify the generator group foreign key in the WASTE record.

Access should be restricted to the SWITS administrator.

Business users: ????????

GEN_1.30.1 Waste Edits**Description**

These are the edits applied to the waste before it is marked as ready to ship. The fields edited depend on the waste types applied to the waste record.

The user decides when to run these edits.

Notes

Refer to the spreadsheet "waste_generation" in the SWITSUPD/CS Conversion/Requirements Documents/CCB Approved Requirements directory.

GEN_1.30.15 Print LDR Letter Screen**Description**

Print the LDR letter that applies to this waste.

Assumes that the LDR entries for this package have been made.

Business users: GENERATOR, WMR, FULL READ ONLY

GEN_1.30.15.1 Pop Up for Land Disposal Notification and Certification Screen**Description**

Screen SWIP888 accepts parameters for a selection type, MANIFEST, PACKAGE or PORTFOLIO, and then a specific value for the chosen selection type.

Notes

NOTE: REQUEST number is no longer used. The Request table is not available.

SCREEN DATA
ELEMENT NAME

SWITS DATABASE
DATA ELEMENT NAME

Type of selection must be MANIFEST, PACKAGE, or PORTFOLIO
 Selected value SHPMNT_MFST_NUM, CON_PKG_ID or CON_REQ_NUM

EDITS, REQUIRED FIELDS, and DEFAULTS:

SHPMNT_MFST_NUM, CON_PKG_ID
 or CON_REQ_NUM Required entry. Entry must be valid value according
 to the type of selection being made.

ADDITIONAL PROCESSING

The screen, where possible, will do validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to do this validation, then the report with headings will be produced with no data on it.

Business users: GENERATOR, WMR

GEN_1.30.15.1.1 Land Disposal Notification and Certification Screen

The Land Disposal Notification and Certification (SWIR353) report lists a specific package or all packages in a selected portfolio or manifest and displays land disposal certification for each package.

Produces one or more LDR's based upon information entered for a package on the SWITS U104 screen. Selection parameters include a "Selection Type" (LDR's by Package, Manifest or Portfolio), and "Selection Value" (a package ID, Manifest # or Request/Portfolio#).

Point of contact for LDR rules and mixed waste is Eric Muhammed.

This report's script has reference in the where clause to con_req_num in waste. The foreign key has reference to req_num of the requests table. That entity currently does not exist in the Designer. [12/1/99 - requests do not exist. Reporting is by item or by shipment.]

Report Data Element Name	SWITS Database Data Element Name
Generator Name	SHPMNT_GGRP_ID
Package No.	CON_PKG_ID
Manifest Doc. No.	SHPMNT_MFST_NUM
WSRd No.	CON_WSRD_NUM and CON_WSRD_REV
EPA ID. #:	CMPNY_EPA_ID
1.	based on HDET_WASTEWATER
2.	PSC_DW_NUM
3.	SBC_SUBCAT
4.	PSC_LDR_CD
5.	Check marks based on HDET_CAL_NICK, HDET_CAL_THAL,
HDET_CAL_PCB, and additional text displayed when HDET_CAL_HOC value is not null	

- 6a. Check mark displayed when HDET_UNDER is 'A', 'P', or 'D'. Text displayed depends on which value HDET_UNDER holds
- 6b. Check marks and text based on value of HDET_DETERM
- A Text displayed when any LDR_CD for current package is 'A'
- B Text displayed when any LDR_CD for current package is 'B'
- C.1 Text displayed when any LDR_CD for current package is 'C1'
- C.2 Text displayed when any LDR_CD for current package is 'C2'
- C.3 Text displayed when any LDR_CD for current package is 'C3'
- D. Text displayed when any LDR_CD for current package is 'D' with additional text displayed if CON_DEBRIS_FLAG = 'Y'
- E. Text displayed when any LDR_CD for current package is 'E'
- F. Text displayed when any LDR_CD for current package is 'F'
- G. Text displayed when any LDR_CD for current package is 'G' with additional text displayed if CON_DEBRIS_FLAG = 'Y'
- H. Text displayed when any LDR_CD for current package is 'H'

F001 - F005 Spent Solvent

Constituents HCC_DESCR for any occurrence of an underlying constituent with UHC_TYPE = 'SS'

Underlying Hazardous

Constituents HCC_DESCR, UHC_CONC, UHC_UNIT for any occurrence of an underlying constituent with UHC_TYPE = 'UC'

F039 Hazardous Constituents HCC_DESCR, UHC_CONC, UHC_UNIT for any occurrence of an underlying constituent with UHC_TYPE = '39'

Sort Sequence: If selection type is 'MANIFEST', SHPHST_ITEM_NNUM, CON_PKG_ID, otherwise CON_PKG_ID.

Selection: Selection Type - 'MANIFEST', 'PACKAGE', or 'PORTFOLIO'

Type SHPMNT_MFST_NUM, CON_PKG_ID, or CON_REQ_NUM depending on Selection

Data Selects: n/a

Schedule: n/a

Frequency: as needed

Volume: 1-10 pages

Totals: n/a

Page Break: as needed

Requestor/Org Name: Kevin Kirkpatrick

Special Form/Font: hplsc

Report Distribution: 1 copy - Internal Use Only

Programmer Notes: Lettered sections of the report are based on values in the LDR table. If new entries are made to LDR and these values are included in the PSC_LDR_CD field of PKGSUBCAT, the report must be modified to include the new values. Each lettered section has one or more queries and separate report groups in this report.

SWIR353

Page: 1 of 2

LAND DISPOSAL NOTIFICATION AND CERTIFICATION
PACKAGE: 221T-96-055LBL

Generator Name: LBL

Manifest Doc. No.: 28223

Package No.: 221T-96-055LBL

WSRd No.: 400 00

EPA ID.#: WA7890008967

1. Wastewater Non-wastewater X

2. USEPA Hazardous

Waste Codes 3. Subcategory

4. Waste Management

Reference Letter

D001	High TOC Ignitable (greater than 10% total organic carbon)	A
D008	lead characteristic	C2
D011	silver characteristic	D
D004	arsenic characteristic	B
D005	barium characteristic	H
D007	chromium characteristic	C1
D009	NWW low mercury (<260 mg/kg total mercury)	C3
F002	F001-F005 solvent wastes	E
F003	F001-F005 solvent wastes	F
F005	F001-F005 solvent wastes	G

5. X Liquid hazardous wastes containing Nickel at greater than or equal to 134 mg/l.
 X Liquid hazardous wastes containing Thallium at greater than or equal to 130 mg/l.
 X Liquid hazardous wastes containing PCBs at greater than or equal to 50 ppm.

6a. X I have reviewed the UTS list of 268.48 and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.

6b. The determination of underlying hazardous constituents was based on:

X Generators knowledge of the waste X Analysis (attach when applicable)

A - NOTICE FOR WASTE THAT REQUIRES TREATMENT

This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268 Subpart D, 268.32, or RCRA Section 3004(d).

B - WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT

I have determined that this waste meets all applicable treatment standards set forth in 40 CFR Part 268 Subpart D, and all applicable prohibition levels set forth in Section 268.32 or RCRA Section 3004(d), and therefore, can be land disposed without further treatment. A copy of all applicable treatment standards and specified treatment methods is maintained at the treatment, storage, and disposal facility name above. I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in Section 268.32 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment.

C.1 - WASTE TREATED TO CONCENTRATION BASED STANDARDS BY TREATMENT FACILITY

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR part 268, Subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification; including the possibility of fine and imprisonment.

C.2 - WASTE TREATED TO SPECIFIED TECHNOLOGY BY TREATMENT FACILITY

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

C.3 - GOOD FAITH ANALYTICAL CERTIFICATION - FOR INCINERATED ORGANICS

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with 40 CFR Part 264, Subpart O, or 40 CFR Part 265, Subpart O, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such

constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

SWIR353

Page: 2 of 2

LAND DISPOSAL NOTIFICATION AND CERTIFICATION

PACKAGE: 221T-96-055LBL

D - RESTRICTED WASTE SUBJECT TO A VARIANCE

This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 4 above.

E - LAB PACK WASTE USING 268.42(C) ALTERNATIVE TREATMENT STANDARD

I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack does not contain any wastes identified at Appendix IV to 40 CFR part 268. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

F - DECHARACTERIZED WASTE REQUIRES FURTHER TREATMENT FOR UHC'S

I certify under penalty of law that the waste has been treated in accordance to the requirements of 40 CFR 268.40 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet universal treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

G - DECHARACTERIZED WASTE HAS BEEN TREATED FOR UHC'S

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic, and that underlying hazardous constituents, as defined in 40 CFR 268.2, have been treated on-site to meet the 268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

F001 - F005 SPENT SOLVENT CONSTITUENTS

1,1,1-TRICHLOROETHANE
ACETONE
METHANOL
METHYL ETHYL KETONE
METHYLENE CHLORIDE
PYRIDINE
XYLENE (MIXED ISOMERS)

UNDERLYING HAZARDOUS CONSTITUENTS

CONCENTRATION UNIT

1,2,4-TRICHLOROBENZENE

1

MG/KG

F039 HAZARDOUS CONSTITUENTS

CONCENTRATION UNIT

ARAMITE

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature

Title

Date

Business users: GENERATOR, WMR

GEN_1.45 Generator Waste Reporting **Screen**
No Text

Business users: ?????

3.1.3.3 Prepare Waste for Shipment

Before the waste can be shipped it has to pass the waste edits. These edits check that all required information has been entered into the waste record. The edits may be run at any time.

GEN_1.47 D.O.T. Categorization **Screen**
Description

This is an addition to SWITS. This function duplicates SHIP_01 and its sub-functions.

DOT Categorization is the process of defining the Department of Transportation markings and information needed for each package before it can be shipped.

The data for this process may be entered by the Generators based on the regulations in 49CFR173; or they may pass the torch to a Shipping Coordinator (e.g. Ryan Ollero) who will finish the job.

Notes

A new entity has been added to the data model to accommodate the attributes that is required for this process. The entity is called DOT CATEGORY. Each Waste Package may have one primary and possibly many additional DOT Categories associated with it.

The DOT RAD information can be retrieved from the ISOQTY and Isotope tables.

Business users: GENERATOR, WMR, SHIPPING COORDINATOR

GEN_1.49 Enter Shipping Point of Contact/co-ordinator
Description

This function requires input to determine who will ship the package, technical services or the generator. The value entered is the shipping POC.

GEN_1.50 Request to Ship Package Screen

Description

If the container is in Generator control:

The Generator completes his/her data entry before running this process.

This process verifies that the Waste Record has successfully passed the Waste Edits (GEN_1.30.1 as of today). If the record has passed the edits successfully, then this process sets the Request to Ship code to Request to Ship and the Container owner to TSD Rep.

If this action is successful then the Generator can no longer make changes to the WASTE record. The generator-specific fields can be updated.

If the Container is in TSD Ops control:

- The TSD Ops completes his/her data entry before running this process.
- The Waste Edits are skipped. The Request to Ship code is set and the container owner is set to the TSD Rep.

Note that some of ship functionality overlaps SHIP_02 and sub-functions.

Business users: GENERATOR, TSD MANAGEMENT, WMR

3.1.4 ENTER SHIPPING DATA

SHIP_00 Package Shipment Screen

Description

This function will provide a single screen for performing package specific functions.

Notes

Select only packages that have been marked 'Request to Ship' or 'Approved For Shipment'.

Business users: SHIPPING COORDINATOR

SHIP_01 D.O.T. Categorization Screen

Description

This is an addition to SWITS, at one point this function was defined in the Designation section.

DOT Categorization is the process of defining the Department of Transportation markings and information needed for each package before it can be shipped.

The data for this process will be entered by the Generators based on the regulations in 49CFR173?

Notes

A new entity has been added to the data model to accommodate the attributes that is required for this process. The entity is called DOT CATEGORY. Each Waste Package may have one primary and possibly many additional DOT Categories associated with it.

The DOT RAD information is associated with the Isotope table.

This functionality is needs to be available to the Generators and to the Shipping Coordinators. The preferred method would be to, require the Generators to perform this task before they can 'request to ship' a package. The Shipping Coordinators will have the ability to review and change the Categorization of each package as needed.

Problem - Originally this process indicated that each waste package would have one primary and possibly multiple secondary DOT Categories associated with it. Is this true? Solution – Yes .RMO 11/3/99

Simple Rule

1) Required before Waste Package can be 'Requested to Ship'. Overridden by Ryan Ollero, 12/99 - the generators often don't have the knowledge to do the DOT Categorization. He would rather that someone within the Shipping Coordinator group did it.

Business users: SHIPPING COORDINATOR

SHIP_01_1 RAD D.O.T. Categorization

Description

The D.O.T. rad information must be displayed as follows:

RQ (if RQ marked Y)

Proper Shipping Name

Hazard Class

D.O.T. ID Number

PG (if applicable)

Isotopes (abbreviations) from the isotope table

total activity in TBqs (from total activity - needs converted from curies)

physical, chemical forms

Label

T.I. index

additional information, if applicable

example:

RQ, Waste Radioactive Material, n.o.s.; 7; NA1234; As-234, Pb-123, (Total activity 123 TBq) solid, oxidizer, Yellow-II, 1.0 T.I. (this needs confirmed).

Remainder of rad information - SCO, LSA, exclusive use, etc., must be displayed on the manifest or shipping document and reference the package ID that it refers to.

Fields for WA state codes or TSD acceptance markings should be available.

T.H. 11/2/99

Notes

The rad information for the container is available through the ISOQTY and ISOTOPE tables. The exact way they will be displayed or summed has not been defined.

SHIP_01_2 Non-Rad D.O.T. Categorization

Description

This must display the following DOT information as follows:

RQ - if marked Y
Proper Shipping Name
Hazard Class
DOT ID number
Packing Group
additional information

example:

RQ, Hazardous Waste Solid, n.o.s.; 9; NA3077; PGIII (D007, D008) fields should be available for WA information or TSD acceptance markings

TH 11/2/99

SHIP_03 Maintain Container Checklist

Description

The process of marking off that all of the steps mentioned have been completed. Each of the checklist items can be answered Yes, No or N/A.

After the Waste Package has been Requested to ship, the Tech Services person makes arrangements with the TSD. If the TSD says they can receive the Waste Package then 'TSD arrangements complete' will be checked.

Once the inspection of the Waste Package has been completed then the 'Passed Inspection' status and comments will be completed.

Once the R356 report has been approved by (Mark's group) 'Receipt Report?' should be marked Y or N/A as appropriate.

Once (Bob Bolles) Verification has reviewed the Ready to ship items they will mark the 'Verification Review Complete?' for each item.

All of these checklist items except 'Receipt Report?' and 'Verification Review Complete?' must be marked to Yes or N/A before the 'Shipment Flag' can be set to 'R' which indicates that the Package is ready to be shipped.

SHIP_03_10 Receipt Report?**Description**

This gets marked after (Mark's group) reviews the report and says that all is good and the containers can be shipped to that TSD.

Notes

The receipt report identifies the steps to be taken when the container arrives at the TSD, i.e., forklift required, verification required, etc.

T.H 11/2/99

SHIP_03_11 Acceptance Review Complete**Description**

Documents that verification has performed their review previous to shipment and flags those containers requiring verification.

When the flag is set to 'Y' this indicates that the package needs to go for verification.

This function should indicate that the package has passed verification and a separate screen should be developed that tracks containers requiring verification. T.H. 11/2/99

Notes

Defaults to 'N' until the Verification group manually changes it to 'Y', can be N/A for items that are non-radioactive.

This flag is not to be viewed by the Generators.

SHIP_03_12 Designation Approved?**Description**

Designation has been signed and dated by a designation specialist. This is a manual check of the hard copy.

When a container is approved for shipment, decide who did the designation and store it. Tech Services enters this information. TAH 10/14/99

SHIP_03_14 Profile Accepted?**Description**

A responsible person has checked that the correct profile for the waste stream has been assigned.

SHIP_03_5 Passed DOT/Pin File Inspection?**Description**

Passed Inspection?

Notes

The container must have a PIN associated with the waste package. The pin file will be reviewed by Tech. Services and approval noted that all documentation is present.

The DOT inspection is an inspection of the container after the marking & labeling are done. The DOT inspector assigned shall enter the approval date. T.H. 11/2/99

SHIP_03_8 Lab Pack description report present?**Description**

If Labpack Flag on the waste package is marked "Y", then a relationship must exist in the U108 screen. N/A cannot be selected if labpack flag is Y. T.H. 11/2/99

SHIP_03_9 TSD Arrangements Complete?**Description**

Will the TSD receive the waste package on scheduled ship date?

Notes

Tech Services coordinates with the TSD and arranges for a truck to arrive on the specified scheduled ship date. This function is a manual call to the TSDs.

SHIP_04 Print Generator Checklist Results Screen**Description**

This will be a report that can be printed for each Waste Package that shows the current status of checklist items for the Waste Package.

Notes

What are the selection criteria for this? Package ID? Approved to ship status? Request to ship status? Days to deadline?

Business users: GENERATOR, FULL READ ONLY, WMR, SHIPPING COORDINATOR

SHIP_05 View Requested for Shipment Screen**Description**

This screen will be used by the Generators and Shipping Coordinators to view Waste Packages. Shipping Coordinators will be able to enter/update the Scheduled Shipment Dates, Destination Facility and comment for each package. The amount of data visible to each group will be different.

Notes

Generators will have view only privileges in this process.

Technical services will be able to update scheduled date, shipment flag and comments.

Business users: GENERATOR, WMR, FULL READ ONLY, SHIPPING COORDINATOR

SHIP_05_1 Display Containers Requested to Ship Screen**Description**

Generators may view packages requested for shipment (by generator). This is a view only screen.

Notes

Should generators be allowed to enter comments about the shipment of the waste package?

As per Ryan Ollero on 12/01/99, this is fine, he has no problems with the generators entering comments about the shipment of waste. 12/15/99 - If the comments are in the generator-specific fields that works OK. Which other fields can the generators update?

SHIP_05_2 Review Containers Requested to ship by shipment Deadline**Description**

Provides a summary from all the generators of the waste and deadline dates for Technical Services. Technical Services will be able to enter Scheduled Shipment Date, Destination Facility, Shipping Comments for each package.

SHIP_06 Schedule Shipment**Description**

During this process the technical services person will gather all of the information needed to schedule a shipment of waste. All information for the completion of schedule shipment is as follows:

- 1) DOT categorization
- 2) Container Requested to ship
- 3) Request to ship items on Container check list is complete.

Other required information pertains to the TSD and TSD related information, like the point of contact etc. See other functions of ship_06...

Entity Note

Facility: In this function we will use the from container location facility.

TSDFACIL: We need to use TSD facility to get the point of contact.

Our 'to_tsd_location' should be coming from the facility entity.

Notes

To schedule the shipments the following must be completed:

- Co-ordinate with the TSD
- Enter TSD 'TO' Location by Technical Services (SCHEDULED TO LOCATION)
- Enter Schedule shipment date by Technical Services (SCHEDULED SHIP DATE)

- Check container data, 'FROM' location entered by Generator
- ? Enter Point of Contact (either will have been completed or will change when they check the date)
- ? Review DOT information entered by Generator
- Schedule Inspection entered by Technical Services
 - Identify Person
 - Identify Date Scheduled for Inspection
 - Inspection Report for Transportation Logistics

Once the container has been scheduled for shipment, updates to the container must be limited to shipment people in Tech Services (R. Ollero, ...).

Who determines where the waste package is being shipped to? The Shipping Coordinator enters the TO Location. He/she may be directed by the generator, the TSD Rep, the Verification team, ...

SHIP_06_1 Co-ordinate with TSD

Description

This is a manual process that is handled outside of SWITS.

SHIP_06_1_1 Report for TSD will shows what will arrive and when Screen

Description

This is R356 Receipt Report in the existing SWITS.

Business users: TSD OPERATIONS, TSD REPRESENTATIVE, SHIPPING COORDINATOR

SHIP_06_1_2 Update checklist

Description

Update the checklist when the move is coordinated with the TSD Ops.

SHIP_06_2 Enter Schedule Ship Date

Description

Manual entry of the anticipated ship date co-ordinated with the TSD. Entered by Technical Services.

Scheduled ship dates may not always equal actual ship date. Scheduled ship dates are selected based on the deadline date for the waste package. T.H. 11/2/99

SHIP_06_3 Enter TSD Location 'To Location'

Description

Manual entry of the TSD location co-ordinated to receive the package. Entered by Technical Services.

This is the TSD that shall be shown on the shipping documents as the to location. TH 11/2/99

Notes

Where is the 'To Location' to be recorded, does it have to be an entry that the generators make or is this something that tech services determines?

Technical services will do this with the automated shipping process.

SHIP_06_4 Enter Special Handling Instructions

Description

On shipments need to have a comments field that the TSD can use to define special equipment needed. Cindy Stratman, 11/4/99.

SHIP_06_6 Schedule Inspection

Description

Manual process of assigning a WMNW Rep. to inspect each waste package.

Notes

- Identify Person
- Identify Date scheduled for inspection.
- Inspection Report for transportation logistics.

SHIP_06_7 Enter Ship Point of Contact

Description

The name of the shipper assigned to the scheduled shipment This selection may be done by the Generator or by Tech Services. The POC may only be from the Shipment Coordinator Role (i.e., from the approved Shipper list).

Notes

Either data entry was done previously or they may alter the point of contact. However, the point of contact must be entered before the item can ship.

SHIP_07 Produce Labeling & Marking Report Screen

Description

This is a report that will be printed by container for the Inspector to use this report will show the DOT Categorization information that needs to be present on the container before it can be shipped.

The report may be requested by inspector or ship date or facility location.

Should display DOT Cat information, scheduled ship date, POC shipper, facility, container information, etc.

Notes

Dumb list that the Transportation Logistics selects (via check boxes) which items are to be printed for the chosen container, and prints list for container inspection.

The report will include the following - select by: Request to Ship flag, container location (all or specified), and inspection person (all or specified):

Display:

- DOT Markings - PSN (Proper shipment name), ID number

- DOT Labels
- TSD acceptance markings
- WDOE markings haz
- TSCA markings 'PCB'
- Packaging reference
- Haz class
- Packing Group

Business users: FULL READ ONLY

SHIP_08 Container Inspection

Description

Physical inspection of container and generator pin file to verify correct Labeling, Marking and Packaging. Once the manual step of doing the inspection is completed the inspector needs to go to the checklist and enter the results of the inspection that has been completed.

Notes

- Enter Inspection approval date.
- Enter Inspection Failure and comment.
- Enter DOT segregation issues, if any.
- Update Container checklist once complete.

SHIP_08_1 Pass Container Inspection?

Description

Once container has passed inspection update the checklist, if the container fails inspection the inspector will take the needed actions

SHIP_09 Declare Container Approved For Shipment

Description

This is a post inspection step that will set the shipment flag to a value that this container was inspected and has passed the inspection. The container can now be displayed on the container location report used for preparing shipping orders.

Once all the container checklist items are marked, the approved for shipment flag is set to "Y". TH 11/2/99. [12/15/99 - this process may be manual (as modeled) or automatic (when all checklist items are filled in this process triggers and set the Approved to Ship flag).

Notes

Will enter the Date that the container is ready to ship.

Change Shipment Status Flag, this flag had been set when the container was requested to ship.

Notify (via e-mail who??) that the container is ready for shipment.

07-26-99

Once all items on Container Checklist are marked 'Y' or 'N/A' the ship_flag should automatically be set to Ready.

Simple Rule

Will enter the Date that the container is approved for shipment.

SHIP_10 Produce Container Location Report, similar to SWIR302. Screen

Description

This process displays all containers that have been inspected and flagged 'ready to ship'.

This data will be used as a report and screen that the transporters will use to determine which trucks the containers will be shipped on.

The report will be printed and sent to the transporters and then the Shipping Coordinator will enter the Scheduled Shipping Document Number, truck numbers and datetimes for each Package that has been requested to ship. This information will be used later to automatically build the manifests.

Notes

Who put in this Question -----"Can anyone explain this??" One of the R1xx reports? Generator may use a comments field to describe the location, driving directions to the container.

The Screen will have a button that will select and display the next available Shipping Document Number that the shipping coordinator will manually associate with the truck and pickup date-times that they want to have that Shipping Document Number.

The screen should be updatable by Shipping coordinators and Generators should be able to view this screen only.

The report can be generated by both.

Sort by TSCA, RCRA, CERCLA, TRU/LLW, area, container location, POC (for container), TSD 'to location'.

Selection criteria: Scheduled shipment date, Area, shipper point of contact, container location, container destination

Display fields

- AREA
- Container Location
- Point of Contact, both container and shipper
- TSD 'to location' (Container destination)
- Container Info
- Hazard Class
- Packing Group

Business users: FULL READ ONLY, SHIPPING COORDINATOR

SHIP_100 Maintain Package Shipment Reviews Screen

Description

This function happens on each Radioactive Container that has been 'Requested to Ship'

Screen that will be used to identify packages that will be verified, DOT approved and have a TSD Approval.

There needs to be an expanded function near SHIP_03_10 to support Mark's receipt actions. MDE
10/28/99

Notes

Select Individual packages that have been 'Requested to Ship' or all packages that are associated with a 'Scheduled Doc Number' or 'Scheduled ship Date'.

From this screen the TSD Representative will be able to record separate notes on reviews. The record will include the type of review, review date and if the line should be printed or not.

Once the TSD Representative has finished the reviews he will then notify the Shipping Coordinator who will then update the check list items.

From this screen the TSD Rep should be able to call the Non-Conformance screen of choice, either package or shipment.

Also, this screen should allow the ability to select and go to the shipping document of their choice, if the document has been built.

Must a package be either on a shipment or requested to ship in order for it to be marked 'To Be Verified'?
Yes

Where should the 'To Be Verified' Flag be set? To be set in the package review screen.

And who should set it? The TSD Representative or is it someone in the Verification Role? Both should be allowed to set the flag, does this mean that both need to have access to the Package Review screen
Yes.

Does there need to be anywhere else that the people who perform verifications can see this flag other than the Receipt report? Yes a function needs to be added to the Verification process to allow the Verification team to see which packages that have been 'requested or approved to ship' have also been marked 'To Be Verified'.

Business users: TSD REPRESENTATIVE, SHIPPING COORDINATOR, VERIFICATION

SHIP_100_1 Enter review comments**Description**

Waste Packages can have multiple review notes associated with them. Each record will include the review notes, date, type of review and a flag that will indicate as to whether the comment should be displayed in the 'Receipt Report' or not.

SHIP_100_2 Copy Review Notes**Description**

Allow the TSD Representative to select the review notes associated with a specific package and to copy each record to all of the packages that are associated with a 'Scheduled Shipping Doc Number'.

SHIP_10_1 Update Container Shipment info from Location Report**Description**

This is the process where the transporter reviews the report and determines which containers will be picked up by each truck.

A request was made for this to be a screen that the transporters will use to just enter the truck number and pickup date and time into a SWITS shipment screen.

Notes

Temporarily, Technical Services will be doing the data entry of the truck numbers and date/time of pickup based on the hard copy of the container location report. The report will be returned to Technical Services with hand written truck and date/time assignments from the transporters.

Also, Technical Services will use the same screen to assign shipping document numbers to the packages.

Display all packages that have been marked 'Requested to Ship'.

Needs to get and display a system generated number that will be used as the Scheduled Shipping document number. The idea was to have a button that could be pressed to select and display the next available number. The Tech Services person would then assign that number to the packages that will be being picked up by a specific truck on a specific pickup date-time.

SHIP_10_1_1 Define pickup date/times and Trucks**Description**

At this point in time this is a manual or non-SWITS process. During this process the Dyncorp (transporters) notify generators and technical services of which packages will go on which truck(s) and the date/time that the truck will be there to pick it up.

This would be nice to have automated so that the transporters would have a screen that they could have the list of all packages that need to be picked up and then they could enter the truck number and date/time that each container would be picked up. Adding this functionality could greatly reduce turn around time and decrease manual creation of reports that get sent back to transportation logistics. Logistics can then create the manifests by truck saving a lot of time and effort.

Another addition would be a report that could be printed for the truck driver instead of the current hand written paper that they get.

Notes

A lot of discussion took place on how to arrange for all of the correct people and resources to be in place at the time of pickup and receiving of the waste that is being shipped. Some waste requires HPT's, forklifts, cranes, etc.

People are not scheduled, this is external to SWITS.

SHIP_10_1_2 Determine Compatibility Segregation Issues for Placement on Truck

Description

This is a manual process during which the transportation logistics group decides which items can be placed on the truck together.

Currently a manual process. The transportation logistics person uses a matrix - based on DOT 49 CFR SEG/SEP table (not in the SWITS database). Once the codes that apply are determined the logistics person must communicate this information to the transporters so they will know how to separate the waste packages on the trucks.

Notes

To be reviewed to determine if this will be a manual process or if it could be automated, may be very difficult and have to wait for a later point in time to be automated. Determined that this function will wait until a future release.

When a container is said to be marked as going on a specific truck on a specific date check compatibility and segregation issues with other containers being placed on the same truck the same day.

needed data to accomplish this are: Hazard Class, Packaging Group

May be very complicated, need to determine if should be done electronically or manually.

This is currently out of scope for now.

SHIP_10_1_3 Enter Shipment Document Number

Description

This is where Technical Services assigns the shipment document number to each package scheduled for shipment.

Notes

This is required data entry that will be used to construct a shipping document in a later process.

SHIP_10_2 Print Shipment pickup report

Description

The report from this process is intended to be printed and/or viewed by the Generators to determine when the truck will be coming to pick up each waste package. A print out of this report can be used for the truck drivers to tell them where to pick up each waste package.

Business users: FULL READ ONLY

SHIP_11 Create Shipping Documents

Description

This includes creating multiple reports associated with the waste. The notes contain a section listing all of the reports we know

This function should pull the information from the DOT Cat.

Notes

This includes creating manifest, pickup report and multiple other reports as follows:

Selection based on scheduled ship date, manifest type, manifest number and truck number

- Manifest -Haz (currently swir330)
- Hazardous Waste Disposal Costs - SWIU202
- Bill of Lading 'PROPOSED' (Have been redirected to rename)
- Shipping List (currently SWIR200)
- Manifest - Mixed
- Attachments for HAZ/ Mixed and PCB
- Lab Pack Report (Existing report need to get the number SWIR..)
- Exclusive Use Instructions

SHIP_11A Create Documents Automatically

Description

A set of screens that will be used to build shipping documents that have gone through the entire shipping process therefore they have a scheduled ship date and scheduled document # which will be used to build the shipping document.

Notes

Based on the Document type - Onsite, Offsite or TSD-to-TSD determine which set of WASTE Edits should be performed or if any at all need to be performed. For TSD-to-TSD no WASTE Edits are to be done. Also, for TSD-to-Offsite WASTE edits can be skipped. All other types would have the WASTE Edits run before a waste package can be placed on the shipping document.

SHIP_11A_1 Create Hazardous Manifest (SWIU200) Screen

Description

Records shipping information for hazardous wastes in all of the shipping tables and associated waste records.

We need more information to define this manifest.

Notes

This was in the original SWITS as SWIU200.

Use the SCHEDULE PKG SHIP to electronically build the manifest according to the 'scheduled shipping document number' that had been entered by Tech Services.

Business users: FULL READ ONLY, SHIPPING COORDINATOR

SHIP_11A_1_1 Shipment Line Item SWIU200A**Description**

Manually create manifest line item.

Notes

Most of the time this step will be an automated process, it was requested that the Technical Services people also be able to add line items manually and then associate packages to that line item.

SHIP_11A_1_2 Packages SWIU200A1**Description**

Manual entry of additional packages associated with the line item.

Notes

Normally will be an automated process. Need the ability to add packages to specific line item manually.

SHIP_11A_2 Bill of Lading Screen**Business Problem**

Need Larry Cole's input on this business function.

Has been approved by Waste Management and needs approval from Fluor Daniel.

It was noted that currently people question as to why track non-rad material and non-reg, the comment that was made is that in order to ship non-rad material and non-reg waste it must be tracked and we are after all tracking waste. The users believe that it is just as important to track these types of waste, that are tracked in SWITS, as it is to track regulated and non-regulated rad regulated.

Required to change the name of Bill of Lading, need new name.

Description

Bill of Lading (BOL) entry screen will be built based on the shipment type. Based on the shipment type display the fields that the person must enter in order to print the appropriate Bill of Lading.

The actual bill of lading will function very much like a manifest, the biggest difference is that the headings will be different.

Currently, SWITS does not track shipment of NON-REG, NON-RAD Material or NON-Reg RAD. The users feel that not only will the BOL satisfy this and it will eliminate the need to produce 5 manually produced documents.

The shipment documents that will be eliminated are RSR, Recycle Center, Non-reg liquid, non-reg solid, samples, haz non-waste "HMSR" material shipment, asbestos, Haz non-reg, Rad non-reg.

Notes

Can probably use the same procedure to build the line items for the bill of lading as for the manifests.

One bill of lading may include records from each NON-REG, NON-RAD MATERIAL, NON-REG RAD.

When a package id is selected check to see that the "to Facility/TSD" is the same in the package as the Bill of Lading "to Facility/TSD".

For the chemical form field, don't know what to use for the chemical form. Some suggestions have been. The table that contains the storage category information is 'storeagecat'. Terry Hexum 8/4/99 says that the field is new. However, Mark Ellefson is adding a compatibility code - e.g., oxidizer, reactive, etc., and these code definitions could be used.

Simple Rule

bill of lading id will actually be saved in the shpmnt_mfst_numfield. The users have requested that it consist of a system generated number with a prefix of 'BOL'.

Business users: SHIPPING COORDINATOR

SHIP_11A_2_1 Non-Reg Rad

No Text

SHIP_11A_2_2 Non-Rad Material

No Text

SHIP_11A_2_2_1 HAZ Non Waste 'HMSR' Material Shipment

No Text

SHIP_11A_2_2_2 Asbestos

No Text

SHIP_11A_2_2_3 Recycle Center

No Text

SHIP_11A_2_2_4 Samples

No Text

SHIP_11A_2_2_5 Excess

No Text

SHIP_11A_2_2_6 Return to Vendor

No Text

SHIP_11A_2_2_7 Landfill

No Text

SHIP_11A_2_3 Non Reg

No Text

SHIP_11A_3 Copy Shipping Document Line Items SWIU200A1A Screen**Description**

Available only from the Manifest Items pop-up, this function allows the operator to copy line items from within a manifest, or between manifests (now called Shipping Documents).

Notes

Need to have the ability to copy line items from one manifest to another.

Is the copy function really copying the exact data or is the copy function moving the line item and all of its associated packages to a different manifest? [TA Hexum, 12/2/99] Actually there is a function to do all of these things - copy line item info, move packages from one line item to another and from one manifest to another.

Should there also be a function to move a package from one manifest to another? [Hexum, T A (Terri)] I believe that is part of the copy process, there is a choice to move with packages or without packages under the line item popup for the U200 manifest screen.

Business users: SHIPPING COORDINATOR

SHIP_11A_4 Automatically Create Mixed Waste Manifest SWIU200M Screen**Description**

Records shipping information for mixed wastes in all of the shipping tables and associated waste records.

We need more information to define this manifest. See Larry Cole for additional input.

Notes

These items should be checked:

Line item - We believe it to be 'shpitm_item_num'.

Con location - We believe it to be the facility id from facility.

CON_GROSS_WGT - We believe this may be the weight used for the mixed manifest shipment.

Business users: SHIPPING COORDINATOR

SHIP_11M Create Shipping Documents Manually

Description

This function will be used to manually build shipping documents, the same way that manifests are currently built.

Notes

Based on the Document type - Onsite, Offsite or TSD-to-TSD determine which set of WASTE Edits should be performed or if any at all need to be performed. For TSD-to-TSD no WASTE Edits are to be done. For TSD-to-Offsite the edits can be skipped also. All other types would have the WASTE Edits run before a waste package can be placed on the shipping document.

Generators will be able to use this screen to build shipping documents for specific purposes only. Such as moving PCB waste.

"Limit the To-Locations that a manual manifest may be created for. (The algorithm to use and list of locations will be provided by the customer during Design phase.)" From the CCB meeting 11/30/99. The intent is to allow the generator to ship some waste to some sites with as little fuss as possible. Just what the generator can be permitted to do isn't defined yet.

Note that to build a manual manifest you must have the DOT categorization complete on the waste package. TLH, 12/16/99.

SHIP_11M_1 Manually Create Hazardous Manifest (SWIU200) Screen

Description

Records shipping information for hazardous wastes in all of the shipping tables and associated waste records.

We need more information to define this manifest.

Notes

This was in the original SWITS as SWIU200.

Primarily used by Generators to manually build manifests for special purposes that do not ever go through the full shipping process.

The process of manually building manifests the system would need to run the check to assure that all data items that must be present for the package to change data control to someone besides Generators. The Data control will not change, but all of the data must be present before the package can be placed on one of these manifests.

Also in the manual process the person creating the manifest will not enter the Manifest number it will be inserted as the Next available shipping document number, using the same sequence generator as the schedule shipment module.

The special purposes may be movement of PCB items from the generator to 4734B - the PCB Storage Facility.

Business users: GENERATOR, WMR, SHIPPING COORDINATOR

SHIP_11M_1_1 Shipment Line Item SWIU200A

Description

Manually create manifest line item.

Notes

Most of the time this step will be an automated process, it was requested that the Technical Services people also be able to add line items manually and then associate packages to that line item.

SHIP_11M_1_2 Packages SWIU200A1

Description

Manual entry of additional packages associated with the line item.

Notes

Normally will be an automated process. Need the ability to add packages to specific line item manually.

SHIP_11M_2 Bill of Lading Screen

Business Problem

Need Larry Cole's input on this business function.

Has been approved by Waste Management and needs approval from Fluor Daniel.

It was noted that currently people question as to why track non-rad material and non-reg, the comment that was made is that in order to ship non-rad material and non-reg waste it must be tracked and we are after all tracking waste. The users believe that it is just as important to track these types of waste, that are tracked in SWITS, as it is to track regulated and non-regulated rad regulated.

Required to change the name of Bill of Lading, need new name.

Description

Bill of Lading (BOL) entry screen will be built based on the shipment type. Based on the shipment type display the fields that the person must enter in order to print the appropriate Bill of Lading.

The actual bill of lading will function very much like a manifest, the biggest difference is that the headings will be different.

Currently, SWITS does not track shipment of NON-REG, NON-RAD Material or NON-Reg RAD. The users feel that not only will the BOL satisfy this and it will eliminate the need to produce 5 manually produced documents.

The shipment documents that will be eliminated are RSR, Recycle Center, Non-reg liquid, non-reg solid, samples, haz non-waste "HMSR" material shipment, asbestos, Haz non-reg, Rad non-reg.

Notes

Can probably use the same procedure to build the line items for the bill of lading as for the manifests.

One bill of lading may include records from each NON-REG, NON-RAD MATERIAL, NON-REG RAD.

When a package id is selected check to see that the "to Facility/TSD" is the same in the package as the Bill of Lading "to Facility/TSD".

For the chemical form field, don't know what to use for the chemical form. Some suggestions have been. The table that contains the storage category information is 'storeagecat'. Terry Hexum 8/4/99 says that the field is new. However, Mark Ellefson is adding a compatibility code - e.g., oxidizer, reactive, etc., and these code definitions could be used.

Simple Rule

bill of lading id will actually be saved in the shpmnt_mfst_num field. The users have requested that it consist of a system generated number with a prefix of 'BOL'.

Business users: GENERATOR, SHIPPING COORDINATOR, WMR

SHIP_11M_2_1 Non-Reg Rad

No Text

SHIP_11M_2_2 Non-Rad Material

No Text

SHIP_11M_2_2_1 HAZ Non Waste 'HMSR' Material Shipment

No Text

SHIP_11M_2_2_2 Asbestos

No Text

SHIP_11M_2_2_3 Recycle Center

No Text

SHIP_11M_2_2_4 Samples

No Text

SHIP_11M_2_2_5 Excess

No Text

SHIP_11M_2_2_6 Return to Vendor

No Text

SHIP_11M_2_2_7 Landfill

No Text

SHIP_11M_2_3 Non Reg

No Text

SHIP_11M_4 Manually Create Mixed Waste Manifest SWIU200M Screen**Description**

Records shipping information for mixed wastes in all of the shipping tables and associated waste records.

We need more information to define this manifest. See Larry Cole for additional input.

Notes

These items should be checked:

Line item - We believe it to be 'shpitm_item_num'.

Con location - We believe it to be the facility id from facility.

CON_GROSS_WGT - We believe this may be the weight used for the mixed manifest shipment.

Business users: GENERATOR, WMR, SHIPPING COORDINATOR

SHIP_11_1 Hazardous Waste Disposal Costs SWIU202 Screen**Description**

Used to capture hazardous waste disposal cost information by manifest / item #. The paper source for the data is the shipping invoice sent to the generator from the transporter.

8-3-99 this process has combined all of the data that will be needed to make the cost determinations. Costs are recorded on by manifest line item where each line item may consist of multiple waste packages.

Entity Note

The shipment item entity will need to have a new attribute added called TRANSPORTATION COSTS

Notes

The Haz Waste manifest must completed before this can be done.

The process actually looks at each like item and the disposal cost for each.

There needs to be a front screen that the data is entered into and then the SWIR202 report will be printed.

There will be a calculated field called CONTAINER COUNT which will be the number of waste packages that are associated with the Manifest.

----- From the Problems section -----

This is a table for Nancy's input (Contract Specialist for Waste Mgmt)

Questions that came up after 8-3-99 meeting:

We noticed that we had written down that the majority of the information was being collected at the line item level and then all of a sudden we have the container - weight, size, type, dw nums and lab pack flag which goes to the further down details. The question is: should we be summarizing these data or were you requesting that the individual container info also be displayed?

I only need the information by line item.

Nancy Weston
Waste Management
372-0574

Business users: SHIPPING COORDINATOR

SHIP_11_1_1 Record Actual Ship Date

Description

Record the date that the shipping document was first signed by transporter 1. This will be done at the shipping document level but it needs to go back and update the individual package's actual ship date associated with that manifest.

Notes

The elements of package id and ship date should be reviewed to determine if these should be the only fields for this screen.

SHIP_11_1_2 Set Shipped Flag to Shipped

Description

This will indicate in the scheduled shipment entity that the package has been shipped, therefore the record will not appear on the reports 'Requested to Ship' or 'Ready to Ship'.

SHIP_11_1_3 Close out Shipping Documents

Description

A close out of a shipping document (manifest) occurs after the following:

- 1) An Invoice and Certificate of Disposal are received from the TSD.

2) The date of when the documents are received is entered into the shipment record. This closes out the manifest.

SHIP_11_2 Maintain Shipping Information Screen

Description

This function will be used to display a specific shipping document and be shipping document the Shipping Coordinator will be able to input the Actual Ship Date and Close out the shipping document when the 'manifest received report' is received by Tech Services.

Notes

Changes should not be done to the Document contents from this function.

When the Actual Ship Date is entered then update the Actual Ship Date for each Waste Package included on the shipping document and then set Shipped Flag to Shipped. Setting the shipped flag will indicate that this scheduled shipment has been picked up.

Simple Rule

Only save the first Actual Ship Date to the Waste record.

Only Save the first associated shipping document number to the Waste record.

Business users: SHIPPING COORDINATOR

SHIP_11_3 Data Selection Pop-Up Form for SWIR200 Screen

Description

Prompts for mandatory Manifest Number

Business users: FULL READ ONLY

SHIP_11_3_1 Shipping List Report SWIR200 Screen

Description

Reports DOT Name, Profile, and total waste weight by item number for the selected manifest.

Then it grabs the DW numbers and designation code, then all the hazardous components; then the minimum and maximum concentrations both as weight percent and parts per million.

Lastly, it gets the labpack flag, container type and size, and Subpart CC field.

Entity Note

```
select shpitm_mfst_num,
       shpitm_item_num,
       shpitm_dot_name,
       shpitm_profile_num,
       sum(con_waste_wgt)
from allmfst, waste
```

```

where shphst_pkg_id = con_pkg_id
and shpitm_mfst_num = :manifest
group by shpitm_mfst_num,
        shpitm_item_num,
        shpitm_dot_name,
        shpitm_profile_num
order by shpitm_mfst_num, shpitm_item_num

```

```

select distinct
from shiphist, hazdetail
where shphst_pkg_id = hdet_pkg_id

```

```

select distinct
shphst_mfst_num, shphst_item_num, haz_comp_id, haz_comp_text
from shiphist, chemcomp
where shphst_pkg_id = haz_pkg_id
order by haz_comp_text

```

```

select shphst_mfst_num,
       decode(min(to_number(haz_comp_wgt_pct)),
              max(to_number(haz_comp_wgt_pct)),
              to_char(min(to_number(haz_comp_wgt_pct))),
              to_char(min(to_number(haz_comp_wgt_pct)))||' - '||
              to_char(max(to_number(haz_comp_wgt_pct)))) COMP_WGT_PCT,
       '1' wgt_pct_order
from shiphist, chemcomp
where shphst_pkg_id = haz_pkg_id
and haz_comp_wgt_pct is not null
and (translate(lpad(haz_comp_wgt_pct, 7, ''),
                '123456789.', '000000000000') = '00000000'
and ltrim(haz_comp_wgt_pct) <> '.')
and shphst_mfst_num = :SHPHST_MFST_NUMq3
and shphst_item_num = :SHPHST_ITEM_NUMq3
and haz_comp_text = :HAZ_COMP_TEXTq3
and haz_comp_id = :HAZ_COMP_IDq3
group by shphst_mfst_num, shphst_item_num, haz_comp_id, haz_comp_text
UNION
select distinct
shphst_mfst_num,
haz_comp_wgt_pct comp_wgt_pct, '2' wgt_pct_order
from shiphist, chemcomp
where shphst_pkg_id = haz_pkg_id
and (translate(lpad(haz_comp_wgt_pct, 7, ''),
                '123456789.', '000000000000') <> '00000000'
or ltrim(haz_comp_wgt_pct) = '.')

```

```

and shphst_mfst_num = :SHPHST_MFST_NUMq3
and shphst_item_num = :SHPHST_ITEM_NUMq3
and haz_comp_text = :HAZ_COMP_TEXTq3
and haz_comp_id = :HAZ_COMP_IDq3
order by 3, 2

select shphst_mfst_num,
       decode(min(to_number(haz_comp_ppm)),
              max(to_number(haz_comp_ppm)),
              to_char(min(to_number(haz_comp_ppm))),
              to_char(min(to_number(haz_comp_ppm)))||' - '||
              to_char(max(to_number(haz_comp_ppm)))) COMP_PPM,
       '1' ppm_order
from shiphist, chemcomp
where shphst_pkg_id = haz_pkg_id
and haz_comp_ppm is not null
and (translate (lpad(haz_comp_ppm, 7, ' '),
                 '123456789.', '000000000000') = '00000000'
     and ltrim(haz_comp_ppm) <> '.')
and shphst_mfst_num = :SHPHST_MFST_NUMq3
and shphst_item_num = :SHPHST_ITEM_NUMq3
and haz_comp_text = :HAZ_COMP_TEXTq3
and haz_comp_id = :HAZ_COMP_IDq3
group by shphst_mfst_num, shphst_item_num, haz_comp_id, haz_comp_text
UNION
select shphst_mfst_num,
       haz_comp_ppm COMP_PPM, '2' ppm_order
from shiphist, chemcomp
where shphst_pkg_id = haz_pkg_id
and (translate (lpad(haz_comp_ppm, 7, ' '),
                 '123456789.', '000000000000') <> '00000000'
     or ltrim(haz_comp_ppm) = '.')
and shphst_mfst_num = :SHPHST_MFST_NUMq3
and shphst_item_num = :SHPHST_ITEM_NUMq3
and haz_comp_text = :HAZ_COMP_TEXTq3
and haz_comp_id = :HAZ_COMP_IDq3
order by 3, 2

select con_pkg_id, con_req_num, con_labpack_flag, con_cntyp_cd,
       con_size_descr, hdet_subpart_cc,
       shphst_mfst_num, shphst_item_num
from waste, shiphist, hazdetail
where con_pkg_id = shphst_pkg_id
and con_pkg_id = hdet_pkg_id (+)

```

Business users: FULL READ ONLY

SHIP_11_4 Print Shipping Documents Screen

Description

Print manifests that have been created through the Document creation screens.

Based on the document type the appropriate layout should be chosen.

This may actually have 4 different layouts associated with it.

Notes

Used to select the shipping document you would like to print and the associated document #.

Business users: FULL READ ONLY

SHIP_12 Approval of Shipping Documents

Description

This is manual process of signing all documents associated with each shipment.

SHIP_12_1 Record Changes or Revisions to the Shipping Document

Description

Sometimes there are last-minute changes to the shipping documents (manifest). These are recorded on the shipping document for eventual updating in SWITS.

SHIP_13 Containers get transported

Description

This is where the containers are shipped.

SHIP_16 Shipping Documents Unreturned (SWIR203 Report) Screen

Description

This report displays all shipping documents that have not received a return shipping document (manifest) from the TSD. The report is grouped by the following:

- 1) Greater than 40 *days old
 - 2) Less than 30 *days old
 - 3) Between 30 and 40 * days old
- * Days = days between actual ship date and today's date

Notes

In addition to the current report information add number of days since actual ship date.

Business users: FULL READ ONLY

SHIP_18 Produce Records Holding Hardcopies

Description

This process does not create any new documents; this process is actually the storage of the all of the official hardcopy records that say what happened to the waste package.

SHIP_21 Display Shipment History Screen

Description

Displays the shipping History for a specific waste package.

Notes

Modification Note #006

Submitted by D. Hagel

Display full shipment history for each Waste Package including the Manifest Number, Item number, Shipment date and Destination

Business users: FULL READ ONLY

3.1.5 ENTER TREATMENT, STORAGE, AND DISPOSITION DATA

TSD General Issues

Question: How does CWC want to declare "staging areas"; determine if Generator / Burial Grounds, CWC and Process Facilities can be defined to use common functions.

Answer: T-Plant/Burial Grounds will use Facility and Unit for General Locations, Burial Grounds will use Facility/Unit/Module/Tier Level/Tier Pos for Detailed Locations. CWC will use Facility/Section/Unit for general locations, Facility/Section/Module/Tier Level/Tier Pos for detailed locations

Question: What date element will be used to stop the generator shipment deadline clock, and start the verification clock? Will the end date for verification performance be the TSD accept date?

Answer: Added TSD_RECEIPT_DT to the waste record to mark the start of the verification clock, end of clock is the TSD accept date.

Question: Does ownership of a TSD accepted container shift from the TSD to Tech. Services when existing CWC inventory is pulled for verification, segregation, or other re-processing? If ownership does change, do we need a function to support this?

Answer: Yes, ownership changes. Fully defined in the shipping module.

TSD_1 Physical Inspection at TSD

Description

Containers are inspected when they arrive at the TSD. May be as simple as a quick kick'n'count and comparison with the manifest.

TSD_2 Stage Waste, Spot Truck at TSD**Description**

The delivery truck trailer and / or its waste package contents may be stored at a CWC staging area while awaiting a RAD CON survey (for RAD wastes), immediate shipment to another facility for verification, or physical inspection prior to unloading.

TSD_3 RAD CON Issues at TSD**Description**

Some waste types must be surveyed for RAD contamination / dose rates prior to being unloaded to a staging area. For a variety of reasons these inspections may not be done immediately.

The decision to unload the truck vs. return the waste to the generator when discrepancies are found is based on a number of external factors that will not be covered in SWITS.

TSD_4 Maintain TSD dates and Container Movement Screen**Description**

Currently maintained on SWIU300. Waste packages are removed from the truck, and placed in the TSD staging area. The shipping manifest is signed off and returned with the driver. Note that at this point the waste packages are probably still the property of the generator, not the TSD.

Notes

Modified by Tillie on 11/2/99

This screen should be very similar to SWIU300.

Will be used by CWC, T-Plant and the burial grounds. For the most part this function has 4 move functions and the ability to insert 3 dates

ADDITIONAL PROCESSING:

Packages with a package status (CON_PKG_STATUS) of 'R' are not accessible from this screen.

Updates to a Container's Location Facility, Location Unit, Quadrant or Relocation Date values will create a Relocation History record unless the TSD Accept Date field was originally blank. The Relocation History Record will retain the previous location information (Facility Location, Unit and Quadrant), and the last relocation date when changes to the record are committed.

When TSD Accept Date is changed from null to a non-null value, the date is also placed in shpmnt_tsd_accept_dt, provided that field is also null.

The Relocation History pop-up screen (Figure 6-36) is used to display the relocation history of the record displayed in the main SWIU300 screen. No updates are allowed from the pop-up.

Data Elements:

Date RELOC_DT

Facility RELOC_FROM FACIL_ID

Quadrant RELOC_FROM_SECTION

Unit RELOC_FROM_UNIT.

This function needs to have to allow a user to transfer control of a container to the Generator.

Business users: TSD OPERATIONS

TSD_4.1 Update Relocation History

Description

A package relocation record is created if the waste is RAD, the package has a TSD accept date, and any of the location values for Facility, Quadrant, or Unit (Trench) change.

An open question is whether a relocation record should be made. When moved to trench? Moved from trench to HIC? Grouted in place?

10/7/99 - Relocation history starts when the package is accepted at the TSD. New record whenever the facility or unit changes. CL Stratman

TSD_4.2 Sign Shipping Documents

Description

When the Shipping Document (Manifest) is signed this shows that the waste is physically located at the destination; it does not show that the waste has been accepted by the destination. Recording the signature, date, etc., is done by the shipper when the shipping document (manifest) is returned - not here.

TSD_4.3 Apply TSD Disposal Date to Container Screen

Description

Function used to capture a date that a package was disposed of. Operations is still working out the business rules, but this field will be used in a manner similar to the TSD accept date.

Business users: TSD OPERATIONS

TSD_4.4 Apply TSD Receipt Date Screen

Description

The TSD receipt date identifies the date that the waste passes from the generator to operations custody. It marks the start date for determining verification performance, and for wastes shipped from a generator to a TSD, usually coincides with the actual ship date that stops the generator shipment clock. Once set, this date is not removed, even if the waste is rejected by the TSD for a nonconformance issue.

This function appears separately from the relocation event, because waste may be generated, then declared as Operations controlled without moving (T-Plant).

11/12/99 - the TSD Administrator role has the ability to remove a TSD accept date or change the date. This is not a power to be used lightly.

Notes

Make a RADBILL process to create a radbill record when a package is accepted at a TSD and no record when the package is overpacked at the TSD. The full details to be worked later. DLM, 10/13/99.

In other words, the insertion of a TSD Accept Date in a WASTE record creates a record in the RADBILL table.

At TSD accept time, check the charge codes for validity but do not prevent the acceptance of material. Notify Roberta that the error occurred. RAB 10/14/99.

Business users: TSD OPERATIONS

TSD_4.5 Move Container

Description

This function and its sub-functions need to record the relocation history for radioactive packages (Function TSD_4.1 as of 12/15/99).

10/7/99 - The relocation history starts when the package is accepted at the TSD. New record whenever the facility or unit changes. CL Stratman

TSD_4.5.1 General Move, Individual Container

Description

This function should be used to move individual containers that will not be being placed into a module, encasement or located by GPS. Moves included could be to a staging area or a trench (pkg not in a module).

Function to move a container to a burial grounds staging area, or to support any other move operation where the detailed location is not known or wanted. The TSD accept date will not be applied, replaced by a "receive" date, to provide a start date for verification performance assessment activities.

TSD_4.5.2 Detailed Move, Locating in Module

Description

Move a container to, or between detailed locations at the burial grounds. Location fields include the Facility, Unit, Module, Tier Level and Tier Position. Purpose of this function is to support placement of long-term storage wastes in the burial grounds or HIC's.

TSD_4.5.3 Move to Encasement

Description

An encasement, a superclass of HIC, is a place where waste may be placed. An encasement has some of the attributes of a location and some of a container.

Waste placed in an encasement is considered stabilized.

Waste may be stabilized without being placed in an encasement.

TSD_4.5.4 Move to GPS identified area, used by Burial Grounds

Description

Packages placed in the burial grounds for long-term storage are located using GPS coordinates, as opposed to a Facility / Storage Area. SWITS currently supports a GPS tracking system separate from the barcode and screen interfaces.

TSD_5.2 Apply TSD Accept Date to Container Screen

Description

A new function to record the TSD accept date and transfer ownership of the waste from a generator or verification team to the receiving TSD. The location data for the package would not change.

Note: During the edit checks (if any) for this process Roberta Barcot wants the package accepted even if the charge code is wrong. She will fix the charge code later. The case she wants to avoid is trying to accept a package shortly after year-begin when none of the charge codes are in place yet.

Additional functions required: Change the control of the WASTE record (stored in CON_CONTROL) to TSD; reset the ShipRequested flag to Not (e.g. the record is out of the shipping loop); set the to-be-verified flag to NOT.

10/7/99 - The relocation history starts when the package is accepted at the TSD. New record whenever the facility or unit changes. CL Stratman

Business users: TSD OPERATIONS

TSD_7 TSD Reporting

Description

A listing of the current SWITS forms and reports used to support TSD inventory reporting.

TSD_7.04 SWIP336 Pop Up for Relocation History Report SWIR336 Screen

Entity Note

Validate Date Range

DEFINE PROCEDURE

NAME = VALIDATE_DATE_RANGE

DEFINITION = <<<<

PROCEDURE VALIDATE_DATE_RANGE (DATEFROM IN DATE, DATETO IN DATE) IS
BEGIN

```

IF DATEFROM > DATETO THEN
  GET_ERR_TEXT('E078');
  MESSAGE(:GLOBAL.ERR_TEXT);
  GO_FIELD(:SYSTEM.CURSOR_BLOCK||'.DATE_FROM');
  raise FORM_TRIGGER_FAILURE;
END IF;
END;

```

Generator Group Id Pop up

```
select ggrp_id, ggrp_name into :swip891.ggrp_id from gengroup order by 1
```

Notes

Parameters include an optional date range and/or package id.

EDITS, REQUIRED FIELDS, and DEFAULTS:

RELOC_DT Optional. The date range defaults to Jan 01, 1940 to Dec 31, 2039 if left blank. If the "From" date is supplied without a "Thru" date, then the "Thru" date defaults to the "From" date.

RELOC_PKG_ID Optional. If entered, the Package must match exactly (no wildcards). This parameter defaults to NULL if left blank.

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.04.1 SWIR336 Relocation History Report Screen

Description

Displays the relocation activity and history for RAD packages within a date range, or for a specified package.

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.05 SWIP351 Pop Up for container Listing report Screen

Description

Parameters include a location facility, unit, quadrant (section) and a dangerous waste number.

Notes

Element Name

Location Facility CON_LOCN_FACIL_ID

Unit CON_LOCN_UNIT

Quadrant CON_LOCN_SECTION

Waste Number PDW_NUM

EDITS, REQUIRED FIELDS, and DEFAULTS:

Location Facility Required, wildcard supported.

Unit Optional, defaults to '%'. Wildcard supported.

Quadrant* Optional, defaults to '%'. Wildcard supported.

Waste Number Optional, defaults to '%'. Wildcard supported.

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.05.1 SWIR351 Dangerous Waste Numbers by Facility Screen

Description

Report SWIR351 provides a listing of packages in TSD custody having dangerous waste numbers. Selection can be limited to specific dangerous waste number(s) and by facility, a unit and/or quadrant. The packages are grouped by facility and sorted by package ID.

Notes

Data Element Name

Facility CON_LOCN_FACIL_ID

Package ID CON_PKG_ID

Secondary Package ID CON_SEC_PKG_ID

Secondary Waste Grp RDET_SWTYP_GROUP

Waste Numbers HDET_DW_NUM

Desig Code HDET_DESIG_CD

Components HAZ_COMP_TEXT

Weight (Kg) HAZ_COMP_WGT

Weight % HAZ_COMP_WGT_PCT

Category CON_SCAT_CD

Selection: nvl(con_locn_facil_id,' ') like facility specified
 and nvl(con_locn_unit,' ') like unit specified
 and nvl(con_locn_section,' ') like quadrant specified
 and pdw_num like dangerous waste number specified

Data Selects: Hazardous waste in TSD custody (HAZTSDWASTE view)

Sort Sequence: con_locn_facil_id and con_pkg_id

Schedule: None

Frequency: As requested

Volume: TBD

Totals: Facility Total - Count of packages selected for each facility.

Requestor: Susan Stitt

Report Source: New

Special Form/Font: hplsc - HP LaserJet in landscape mode with compressed characters

Programmer Note: The display of the facility ID field and column heading in the report body is variable depending on the facility specified by the user. If a complete facility ID ('2403WD') is selected by the user then the report only contains packages for that facility and the facility ID only appears in the title. When a pattern is specified for the facility ID ('2403W%') then the facility ID groupings appear in the report body.

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.06 SWIR338 Ignitable and Reactive Waste Report Screen**Description**

The SWIR338 report is a facility/building inventory report listing only the sum of container volume of containers in a facility/building that have dangerous waste numbers 'D001' and/or 'D003', ignitable reactive. There are currently no input parameters; the report is hard coded for the 600 and 200W facilities.

Notes**Report Data Element Names**

Area FACIL_AREA

Building FACIL_NAME

Section CON_LOCN_SECTION

Storage Category SCAT_CATEGORY

Waste Codes PDW_NUM

Quantities CON_CNTR_VOL

Maximum Allowable St ... decode(facil_area, con_locn_facil_id

Physical Properties CON_PHYS_STATE_CD

Storage Area constru... decode(con_locn_facil_id

Fire Protection Features decode(con_locn_facil_id

Justification for Qty Changes... decode(con_locn_facil_id

Sort Sequence: CON_LOCN_FACIL_ID, FACIL_AREA, FACIL_NAME, CON_LOCN_SECTION, SCAT_CATEGORY

Selection: CON_PKG_STATUS IN ('K', 'T', 'X'), PDW_NUM = 'D001' OR PDW_NUM = 'D003',
FACIL_AREA IN ('200W', '600')

Schedule: n/a

Frequency: n/a

Volume: Approximately 40 pages

Totals: Sum (CON_CNTR_VOL) * 264.17 for each facility/building, converted to gallons

Page Break: FACIL_AREA, CON_LOCN_FACIL_ID, CON_LOCATION_FACIL_SECTION, SCAT_CATEGORY

Requestor/Org Name: Sue Stitt, SWO

Special Form/Font: None

This report currently contains many (too many) hard coded data items (Maximum Allowable Storage Capacity, Storage Area Construction Materials, and Fire Protection Features). These items should be put into facility description tables and expanded for the entire data set.

The entire report is based on one massive select statement from the STORAGECAT, WASTE, FACILITY, and PKGDW tables. Many of the columns returned from the select are 'skipPed' in the Field section of report writer and mapped through &SQL statements to other created fields to allow concatenation of data into variable length strings.

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.09 SWIU305 Individual Package Non-Rad TSD Accept/Locate**Screen**

Printed 5:05 PM 3/1/00

Description

This screen is used to receive and locate individual packages of non-radioactive waste. Provision is also made to query by manifest number.

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.1 Inventory Tracking

No Text

TSD_7.1.1 SWID300 Facility Summary Inventory Display Screen**Description**

Display - only screen, used to monitor RAD and Hazardous quantities for the CWC facilities.

Notes**Elements:**

Location Facility ID CON_LOCN_FACIL_ID
 Location Unit CON_LOCN_UNIT
 First TSD Acceptance Date CON_TSD_ACCEPT_DT
 Last TSD Acceptance Date CON_TSD_ACCEPT_DT
 Primary CON_PWTYP_CD
 Secondary RDET_SWTYP_CD
 Secondary Waste Type Description SWTYP_DESCR
 Container Type Description CNTYP_DESCR
 Number of Containers RDET_RSWIMS_COUNT
 Total Volumes (*) CON_CNTR_VOL
 Gross Weight (*) CON_GROSS_WGT
 Isotope Name ISO_NAME
 Unit ISO_UNIT
 Quantity RAD_QTY
 PE-CI RAD_PE_CI
 PU-FGE RAD_PU_FGE
 ALPHA-CI RAD_ALPHA_CI
 Component Text HAZ_COMP_TEXT
 Weight HAZ_COMP_WGT

* SUMMED VALUES FOR LOCATION AREA NAME, LOCATION UNIT, PRIMARY, SECONDARY, AND CONTAINER TYPE.

ADDITIONAL PROCESSING:

This screen presents summary information. This display is of an explosion type, meaning that a more detailed breakdown of the current information may be requested. The screen is shown in five groups. The first is the selection criteria data (Figure 6-41). When requested, the Primary/Secondary Waste Type combinations are displayed (Figure 6-42) for the selected information. The next layer of information, the particular Container Type information for the selected Primary/Secondary Waste Type (Figure 6-43), can be retrieved on request. When applicable, it is possible to "zoom in to" the particular Isotope

Information (Figure 6-44) and/or the summary Chemical Component (Figure 6-45) data for the selected Container.

Selection criteria: Location Facility ID, Location Unit, and an Acceptance Date range.

Sequence: Primary / Secondary Waste Type Codes
 Container Description
 Isotope Name
 Component Text

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.1.2 SWIP304 Pop-up for Building Inventory Report SWIR304 Screen

Entity Note

Lookup on Facility Id

SELECT DISTINCT FACIL_ID INTO :SWIP839.FACIL_ID FROM
FACILITY ORDER BY 1

Lookup on Location Unit

SELECT DISTINCT UNIT_UNIT, UNIT_FACIL_ID INTO :SWIP839.UNIT FROM
FACUNIT

WHERE UNIT_FACIL_ID LIKE :SWIP839.FACIL_ID ORDER BY 1

Lookup on Quadrant

select distinct cl_section into :swip839.section from curielimit
where cl_facil_id like :swip839.facil_id order by 1

Notes

EDITS, REQUIRED FIELDS, and DEFAULTS: Report is used for Operations facilities only.

CON_LOCN_FACIL_ID Required. Must exist in the FACILITY table. A pop-up list of values will be available giving facilities.

CON_LOCN_UNIT Optional. Must exist in the FACUNIT table for the given facility ID. A pop-up list of values will be available giving facilities and their corresponding units.

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.1.2.1 SWIR304 Building Inventory Report Screen

Description

Details building inventory by container PIN, size, type, and description. The user enters the location facility ID and optional unit on which the report is to be prepared

Notes

Elements Storage Category CON_SCAT_CD
Category Description SCAT_CATEGORY
Total Number of Containers count (CON_PKG_ID)
Package ID. Number CON_PKG_ID
Container Type Code CON_CNTYP_CD
Container Type Description CNTYP_DESCR
Container Size Description CON_SIZE_DESCR
Generating Facility ID CON_SRCE_FACIL_ID
TSD Acceptance Date CON_TSD_ACCEPT_DT
Selection: single CON_LOCN_FACIL_ID, optional
 CON_LOCN_SECTION and/or CON_LOCN_UNIT
Data Selects: CON_PKG_STATUS not H, R or V
Sort Sequence: CON_LOCN_FACIL_ID, CON_LOCN_SECTION, CON_LOCN_WAIT,
CON_SCAT_CD, CON_PKG_ID
Totals: CON_PKG_ID by CON_SCAT_CD, CON_PKG_ID by Report
Page Break: Facility/Quadrant/Unit, Storage Category
Requestor/Org Name: Sue Stitt, SWO
Special Form/Font: hp304
Report Distribution: 1 Copy - Internal Use Only

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.1.3 SWIP305 Pop up for Building Location Inventory Report SWIR305 Screen

Entity Note

Location, Facility ID Lookup

SELECT DISTINCT FACIL_ID INTO :SWIP882.FACIL_ID FROM
FACILITY ORDER BY 1

Location Unit Lookup

SELECT DISTINCT UNIT_UNIT, UNIT_FACIL_ID INTO :SWIP882.UNIT
FROM FACUNIT
WHERE UNIT_FACIL_ID LIKE :SWIP882.FACIL_ID ORDER BY 1

Quadrant Lookup

select distinct cl_section into :swip882.section
from curielimit
where cl_facil_id like :swip882.facil_id order by 1
Module Lookup

select distinct con_locn_module into :SWIP882.MODULE
from waste
where con_locn_facil_id like nvl(:SWIP882.FACIL_ID,'%') and
con_locn_section like nvl(:SWIP882.SECTION,'%') and
con_locn_unit like nvl(:SWIP882.UNIT,'%')

order by lpad(con_locn_module,3)
Storage Lookup

SELECT SCAT_CD, SCAT_CATEGORY INTO :SWIP882.SCAT_CD FROM STORAGE
CAT ORDER BY 1

Notes

EDITS, REQUIRED FIELDS, and DEFAULTS:

CON_LOCN_FACIL_ID Required. Must exist in the FACILITY table. A pop-up list of values will be available giving facilities.

CON_LOCN_UNIT Optional. Must exist in the FACUNIT table for the given facility ID. A pop-up list of values will be available giving facilities and their corresponding units.

CON_LOCN_MODULE Optional. Must be valid for the given Location Module. A popup list of values will be available giving available selections.

CON_SCAT_CD Optional. Must be valid for the given Storage Category Code.

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.1.3.1 SWIR305 Building Location Inventory Report Screen

Description

The Building Location Inventory Report (SWIR305) details building inventory by container, secondary package ID, unit, module, tier level and position, and dose-equivalent curies. The user enters the location facility ID and optional unit on which the report is to be prepared.

Notes

Data Elements:

Storage Category	CON_SCAT_CD
Category Description	SCAT_CATEGORY
Total Number of Containers	count (CON_PKG_ID)
Package ID. Number	CON_PKG_ID
Secondary Package ID	CON_SEC_PKG_ID
Module	CON_LOCN_MODULE
Tier Lvl	CON_LOCN_TIER_LVL
Tier Pos	CON_LOCN_TIER_POS
DE Curies	RDET_TOT_DE_CI
Generating Facility ID	CON_SRCE_FACIL_ID
TSD Acceptance Date	CON_TSD_ACCEPT_DT

Selection: single CON_LOCN_FACIL_ID, optional CON_LOCN_SECTION,
CON_LOCN_UNIT, CON_LOCN_MODULE and/or CON_SCAT_CD.

Data Selects: RADWASTE view with CON_PKG_STATUS not H, R or V

Sort Sequence: CON_LOCN_FACIL_ID, CON_LOCN_SECTION, CON_LOCN_UNIT,
CON_SCAT_CD, CON_PKG_ID

Schedule: n/a
Frequency: Weekly
Volume: Approximately 10 to 20 pages
Totals: CON_PKG_ID by CON_SCAT_CD, CON_PKG_ID by Report
Page Break: Facility/Quadrant/Unit, Storage Category
Requestor/Org Name: Sue Stitt, SWO
Special Form/Font: hp304
Report Distribution: 1 Copy - Internal Use Only

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.1.4 SWIP339 Pop Up T Plant Inventory Report by Facility SWIR339 **Screen**
Entity Note
Lookup on Facility Id

SELECT DISTINCT FACIL_ID INTO :SWIP839.FACIL_ID FROM
FACILITY ORDER BY 1
Lookup on Location Unit

SELECT DISTINCT UNIT_UNIT, UNIT_FACIL_ID INTO :SWIP839.UNIT FROM
FACUNIT
WHERE UNIT_FACIL_ID LIKE :SWIP839.FACIL_ID ORDER BY 1
Lookup on Quadrant

select distinct cl_section into :swip839.section from curielimit
where cl_facil_id like :swip839.facil_id order by 1

Notes

Parameters include a Facility, Facility Unit, or Facility Quadrant.

EDITS, REQUIRED FIELDS, and DEFAULTS:

CON_LOCN_FACIL_ID Required. Must exist in the FACILITY table. A pop-up list of values will be available giving facilities

CON_LOCN_UNIT Must exist in the FACUNIT table for the given facility ID. A pop-up list of values will be available giving facilities and their corresponding units.

CON_LOCN_SECTION Must be valid for the given facility ID. A popup list of values will be available giving available sections (quadrants) for the current facility.

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.1.4.1 SWIR339 T Plant Inventory Report by Facility Screen

Description

Report SWIR339 presents building inventory by container, size, type, and description. The user can enter the location facility ID and optional quadrant and unit on which to be reported or make no entry for a total report of all waste at all T Plant facilities

Notes**Report Data Elements:**

Package ID	CON_PKG_ID
Secondary Package ID	CON_SEC_PKG_ID
Container Type Description	CNTYP_DESCR
Container Size Description	CON_SIZE_DESCR
TSD Accept Dt	CON_TSD_ACCEPT_DT
Generating Facility ID	CON_SRCE_FACIL_ID
Waste Description	CON_GENER_WASTE_DESCR
Pkg Status	CON_PKG_STATUS
Generator Comments	CON_GENER_COMMENT
Sort Sequence:	CON_LOCN_FACIL_ID, CON_LOCN_SECTION, CON_LOCN_UNIT, CON_PKG_ID
User Selection:	CON_LOCN_FACIL_ID like facility selected and (CON_LOCN_UNIT like unit specified or all units if unit is not specified) and (CON_LOCN_SECTION = quadrant or all quadrants when quadrant is not specified)
Data Selects:	CON_LOCN_FACIL_ID matches input value or 'TPLANT' if facility is left blank and TSD facility class is 'TPLT' and CON_PKG_STATUS is not 'R' or 'V'.
Schedule:	n/a
Frequency:	As requested
Volume:	Approximately 10 to 20 pages
Totals:	CON_PKG_ID by CON_LOCN_FACIL_ID, CON_LOCN_UNIT and CON_LOCN_SECTION Total CON_PKG_ID for report
Page Break:	Facility/Quadrant/Unit
Requestor/Org Name:	Sue Stitt, SWO
Special Form/Font:	hp304
Report Distribution:	1 Copy - Internal Use Only

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.1.5 SWIP352 Pop Up for Encasement Package Listing SWIR352 Screen

Entity Note**Pop Up for Package Id**

```
select con_pkg_id into :HIC_PKG_ID
```

from waste

```
where con_cntyp_cd in (select code_value from codecheck
                      where code_field_name = 'HIC_CNTYP_CD')
order by con_pkg_id
```

Notes

Parameters include an optional package ID. The Container type code of the package must be a HIC container type (HIC container types are defined on the CODECHECK table under HIC_CNTYP_CD). List of Values supported.

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_7.1.5.1 SWIR352 HIC Package Listing Screen

Description

The HIC Package Listing (SWIR352) reports information about the containers stored in a High Integrity Container (HIC). All HIC packages are reported unless the user specifies a single HIC package id or pattern to match (wildcard).

Notes

Element Names

HIC Package ID CON_PKG_ID

(Inner Packages)

Package ID CON_PKG_ID

Secondary Package ID CON_SEC_PKG_ID

Gross Weight (kg) CON_GROSS_WGT

Packaged Date CONR_DT

TSD Accept Dt CON_TSD_ACCEPT_DT

Selection: optional CON_PKG_ID (single or wildcard pattern matching)

Data Selects: HIC Package - CON_CNTYP_CD matches valid
HIC_CNTYP_CD value as defined on the ODECHECK
table.

Inner Packages - CONR_REL_CD = ?H?,
CONR_PKG_ID = HIC Package ID

Sort Sequence: HIC Package CON_PKG_ID, Inner Package, CON_PKG_ID

Schedule: n/a

Frequency: n/a

Volume: 1 to 10 pages

Totals: Inner Package Count and Gross Weight for HIC Package

Page Break: As necessary

Requestor/Org Name: Sue Stitt, SWO

Special Form/Font: hpptc

Report Distribution: 1 Copy - Internal Use Only

Business users: TSD OPERATIONS, FULL READ ONLY

TSD_8 Treatment Support Screen**Description**

Requirement is to track quantities of waste treated by treatment method and waste stream, originating from an onsite TSD, both containerized and uncontainerized. Generator treatment and TSD treatment are separate issues; only TSD treatment is addressed here.

Primary responsibility may be T-plant, WRAP, a treatment project.

A design assumption is that a package can only appear against a single batch.

Keep track of Lot number.

Notes

Containers to be sent offsite for treatment will be assembled into "batches". Containers in a "batch" will all require the same kind of treatment (per D. Nester 09/23/99). Containers returning from offsite treatment will be identified by a new package id, but need to be tracked in a receipt "batch". A new field to record the date of final disposal (burial) will be added to the WASTE record.

TSD_8.02 Maintain TBG Waste Treatment History Screen**Description**

Function to capture the quantity, stream code, treatment method, designation code and DW numbers of treated wastes for later display on the Annual Dangerous Waste Report (ADWR).

Notes

Treatment information will be entered manually, and may be for either packaged or uncontainerized wastes. This function duplicates the existing functionality and purpose of the UNCONTAIN table.

Business users: GENERATOR, TSD OPERATIONS, WMR

TSD_8.02.01 Extract Data from Waste Table Screen**Description**

Function to copy a waste package and its dangerous waste numbers to the treatment table. The relationship with the WASTE table is lost, allowing the copied record(s) to be subsequently edited without affecting the original.

TSD_8.02.02 Record Treatments**Description**

A generator waste may be treated using multiple treatment codes.

Notes

Only the first treatment (max. treatment date) is required when preparing the ADWR.

TSD_8.03 Batch Treatment Screen**Description**

Function for tracking waste packages sent in / received back from a waste treatment facility. The user will create batches (as type IN or OUT), assign packages to the batch, and specify one or more treatments and treatment dates.

Business users: TSD OPERATIONS

TSD_8.03.01 Create a Batch**Description**

Create a Batch for containers being sent for waste treatment

TSD_8.03.02 Assign "IN" packages to Batch**Description**

Associate waste containers to a batch for treatment at ATG or other treatment facility.

TSD_8.03.03 Record Treatments to a Batch**Description**

Record one or more treatment types and the date against a batch

TSD_8.03.04 Record "OUT" packages against a batch**Description**

As treated containers are received from a treatment facility, they are entered with new package ID's as newly generated waste. The association of the incoming package with the original batch sent out for treatment is recorded here.

TSD_9 Create a Waste Record Screen**Description**

This is a copy of the generator function to receive an empty container. It has been added to the TSD diagram as a place holder to acknowledge that TSD's occasionally need empty containers for repackaging etc.

Notes

Need to fill in the container ID, container type, container volume, and current location.

The CINVENTORY table contains the generator accept date that must be modified when the container is accepted.

TSD_10 Nonconformances**Description**

Both containers and entire waste shipments are inspected for deficiencies - known as Non-Conformances - at multiple points during the shipping and TSD receiving process. During the shipment process a review is done by the TSD Reps who will record the non-conformances. From this review there may be non-conformances found at the shipment level or at the individual packages level. These non-conformances may cause the package to be unable to be approved to ship. Once the shipment arrives at the TSD another review is done. Once again the non-conformances can be found at the individual package or the entire shipment. These non-conformances are recorded by TSD Operations. TSD Operations can enter Non-conformances at any point once the package has been shipped.

Notes

Given that a container has been overpacked, the verification history of the inner container carries forward to the outer container. No double counting of verifications. Same for nonconformance records. Glen Triner, 9/16/99

TSD_10.1 Record Shipment Nonconformances Screen

Description

A shipment is inspected for defects prior to TSD acceptance. This function is required because errors in the total container count for the shipment etc. apply to the entire shipment, not individual containers.

Business users: TSD REPRESENTATIVE

TSD_10.2 Record Package Nonconformances Screen

Description

Common function for assigning one or more defect codes, an assignee, date, description, resolution date and resolution to a waste package.

Business users: TSD REPRESENTATIVE

3.1.6 ENTER REPACKAGING INFORMATION

The repackaging function is performed by generators and at TSDs. Waste that has been repackaged is considered as newly-generated waste. Thus the TSDs act as both as TSD and a Generator.

7.0 Repackaging

Description

- Repackaging includes the several processes of combining, splitting, and overpacking containers.
- This process may be performed by the Generators or at the TSD site.
- According to Cindy Stratman T-plant fixes a lot of packaging problems by repackaging containers. This includes splitting several drums into several drums (a multi-split and multi-combine).

Data Gathering

For Combine, Labpack, and Disposal Overpack functions several techniques are used to move information about the waste into the new container depending on the type of data involved.

- Container data - Data describing the outer container itself, such as container type and tare weight, are left unchanged.
- Quantity data - Quantities of isotope, packaging, and hazardous components are summed giving one value for each item described. For example, if two inner containers contain acetone, the outer container will show one record of acetone with an amount equal to the total of the original two.
- List data - Lists of data such as Dangerous Waste Numbers will be combined such that each item in any inner container will be listed once in the outer container. For example, two containers having codes D001 D002 in one and D002 D003 in the other will be combined into one container having codes D001 D002 D003.
- Hazard data - For data such as Designation Code (DW or EHW) the worst case will be taken.

- Other Data - The first non-null data found will be used.
- Given that a container has been overpacked, the verification history of the inner container carries forward to the outer container. No double counting of verifications. Same for nonconformance records. Glen Triner, 9/16/99.

Notes

Cindy Stratman, 6/22/99, agreed that the 7 functions listed are used by T-plant and are the all the functions that they need for repackaging. Additional notes are in the individual functions.

12/2/99 - DL Hagel requested that the user not be able to re-label a package - remove this functionality from this screen. A package is re-labeled using the SWIE100 function.

7.1 Combine Packages

Description

Combine - Place the contents of more than one container into another. The outer container is given a gathering of content data from the inner containers.

- One of the inner containers may be the outer container.
- Inner containers which are not the outer container are made to be empty, available containers under generator control.
- The outer container is made Not Empty, In Use, under Generator control.

Notes

'C' - Combine

Supports repackaging the contents of multiple containers into one container. The outer container may be listed as both the inner and outer package if the user chooses to combine inner package detail data with existing detail data on the outer package.

Edits

- inner and outer packages must exist.
- outer package must be the same on each record.
- inner package = outer package relationship permitted.
- outer package must be empty if outer package is not = inner package.
- inner packages may not have been previously repackaged.

Update Processing

outer package -

- See matrix for details

inner packages -

- Package status becomes empty, available, under generator control, if inner package is not = outer package
- Don't roll up the package subcategories. Flush them. Mark Ellefson, 9/16/99 (I think this means that the values in the PKG_LDRDW table are not carried forward. JAG 12/10/99)

7.2 Shipping Overpack

Description

Shipping Overpack - Place one container into another temporarily.

- The inner container retains its location and status (probably Not Empty and In Use; the CON_CONTROL_CODE is left alone).
- The status of the outer container is unchanged.
- This function differs from a Storage Overpack in that the outer container is re-used in a Shipping Overpack.

Notes

'M' - Shipping Overpack

Records the relationship of overpacking a container for shipping. Inner packages are not considered repackaged (package status does not change). Updates to the overpack container include relocating to the inner package locale.

Edits

- Only one record allowed per operation.
- inner and outer packages must exist.
- inner package = outer package relationship not permitted.
- inner packages may not have been previously repackaged.
- outer package container volume must be > inner package volume.

Update Processing

outer package -

- Package status = unavailable
- Secondary package ID = inner Package ID
- Generator ID and Generator Group ID = inner package values
- All location fields = inner package location values

inner package -

- none

Comments

Additional processing wherever location changes can be performed must keep inner and outer package location data consistent when either is moved.

7.3 Labpack Packages

Description

A "lab pack" is a DOT term defined in 49CFR Sec. 173.12.

On the Hanford Site a "lab pack" also means a container that contains other containers; the inner containers may be removed intact, later.

Labpack - Place more than one container into another.

- The inner containers lose their location data and their status (CON_CONTENT_CODE) is changed to Repackaged.
- The outer container is given a gathering of data from the inner containers.

Notes

'L' - Labpack

Labpack packaging of multiple containers and their contents into one container.

- The destination container cannot be listed as both a inner and outer package.
- Adding containers to an existing labpack is permitted.

Edits

- More than one record required per operation unless a previous labpack function has been performed on the outer container and the outer container is in Generator control.
- inner and outer packages must exist.
- outer package must be the same on each record.
- inner package = outer package relationship NOT permitted.
- outer package container volume must be > the sum of inner package volumes.
- inner packages may not have been previously repackaged.

Update Processing

outer package -

- See matrix for details
- Total tare weight of inner containers, if more than zero, becomes waste with a CAS Number of GCNINNERCONT.

inner packages -

- Package status = repackaged
- All location fields set to null
- Don't roll up the package subcategories. Flush them. Mark Ellefson, 9/16/99

7.4 Disposal Overpack

Disposal Overpack - Place one or more containers into another container permanently. The inner containers lose their location data and their status (CON_CONTENT_CODE) is changed to R. The outer container is a gathering of data from the inner containers

This function differs from a Shipping Overpack in that the outer container is permanent, and not re-used in a Storage Overpack.

Notes

'O' - Disposal Overpack

Supports overpacking one or more containers into another for disposal or storage.

Edits

- inner and outer packages must exist.
- inner package = outer package relationship permitted only for one-to-one relationships.
- outer package must be empty and under generator control if outer package is not = inner package.
- inner packages may not have been previously repackaged.
- outer package container volume must be > inner package volume if outer package is not = inner package.

Update Processing**outer package -**

- See matrix for details
- Tare weight of inner container(s), if more than zero, becomes waste with a CAS Number of GCNINNERCONT.

inner package(s) -

- Package status changes to repackaged, if inner package is not= outer package
- All location fields = Null, if inner package is not = outer package
- Overpack - the contents are entered in wt % and probably stored in grams. When the container is overpacked the wt % is recalculated. Mark Ellefson, 9/16/99
- Don't roll up the package subcategories. Flush them. Mark Ellefson, 9/16/99

7.5 Unpack Labpack or Disposal Overpack**Description**

Unpack Labpack or Disposal Overpack - Empty the original outer package. If the unpacking function does not remove all inner containers, re-run the labpack or overpack procedure on the remaining containers.

Notes

'U' - Unpack Labpack or Disposal Overpack

Supports removal of one or more containers from within another container

Edits

- inner package(s) must exist within outer package.

Update Processing**inner packages -**

- Set location = outer package
- Set package status = outer package

outer package -

- The outer package becomes empty, available, and under generator control. If inner packages remain, the original labpack or overpack function is re-run on the remaining packages.

7.6 Unpack Shipping Overpack

Description

Unpack Shipping Overpack - Reverse changes made creating the shipping overpack.

Notes

'U' - Unpack Shipping Overpack

Reverse changes made creating the shipping overpack.

3.1.7 ENTER MISCELLANEOUS INFORMATION

SWIS500 Radionuclide Distribution and Decay Calculation Screen

Description

The isotopic content of a RAD waste package changes over time due to the decay process. This screen is used to set the decay date to use in recalculating the amount of a given RAD isotope remaining as of the provided date. The process is run on an annual basis in "batch" mode, and is resource intensive. The actual calculations are performed outside of SWITS using a FORTRAN program, then the data is imported back into the database. The decay information is then used to generate the EP-125 report.

The radionuclide distribution and decay calculation process consists of using elements of the Isotope Table to determine the "current" portion of radioactive material which remains after the decay process. The word current in this sense means the date selected by the user as the end of the reporting period, which will normally be the end of the previous year or quarter but which could be any date in the past or future. Because a series of reports is likely to be generated for any given reporting period and because decay calculations are very resource intensive, a set of date-specific tables will be generated for the reporting period in which the decay calculations will be made for each combination of disposal date and isotope. These tables will then allow the "current" amount of any isotope to be calculated by merely multiplying the deposited amount of an isotope by the appropriate factor in the table.

Methods used in SWITS activity calculations, i.e., the quantitative determination of the final radioactivity of one or more waste containers, employ the following calculational simplifications:

- 1) daughter product ingrowth is ignored in most calculations, being triggered by a non-null value in the ISO_DTRPRD_FACTR column of the Isotope Table,
- 2) recorded amounts of daughter products are excluded on the basis that they are infinitesimal,
- 3) calculated daughter product isotopes are assumed to be in secular equilibrium with the parent isotopes and are therefore decayed using the half-life of the parent, and
- 4) the radioactivity from all unknown constituents in a waste container is assumed to be adequately modeled by the mixed fission product (MFP) or mixed activation product (MAP) factor activity ratios listed for Isotope 19, as is described in detail below.

The concept of unknown constituents arises because the total activity is measured using a different method than that which is used to determine known constituents. An analogy would be that the weight of an entire container including its contents could be known without knowing the chemical or physical nature of the contents.

Business users: GENERATOR, WMR, TSD REPRESENTATIVE

SWIS501A Maintain TBG Waste DW Numbers

Description

Maintain one or more DW numbers associated with a waste treated by generator record.

SWIS502 ADWR Verification Screen

Description

Used to flag waste packages that need to be "verified" by the Generator / SWE prior to running the Annual Dangerous Waste Report (ADWR) for the WA Dept. of Ecology. Only the CON_GENER_VER_FLAG field in the WASTE table is updateable

Business users: SWITS ADMINISTRATION

SWIS508 Project Tracking

Description

This function is used to track projects and the packages and samples involved in each.

Notes

Previously Form SWIU608.

This screen starts as a fairly mundane data entry for a master-detail-detail relationship. The master is the Project table, the middle detail is the Projdetail table and the lower detail is the Projsample table. Since the Projdetail table has many attributes it is spread across two screen pages. In addition, the capability is provided for mass updates on selected fields in the Projdetail table for all or part of the records for one project. Mass updates are provided for the following data categories: NDE, NDA, Treatment, Open Container, and Project Data.

Business users: TSD OPERATIONS, TSD REPRESENTATIVE, SWITS ADMINISTRATION

3.1.8 DECAY CALCULATIONS

DECAYCALC Calculate Isotopic Decay Factors for MAP and MFP

Description

K.2 PROCESSING

Waste falls into four basic categories: that generated onsite and that generated offsite, and for each of those, known isotopes and unknown. The unknown is assumed to fit the description of either Mixed Activation Products (MAP) or Mixed Fission Products (MFP).

K.2.1 Known Isotopes

Activity calculations for known isotopes are based on the familiar exponential relationship between the quantity, half-life, and time of decay.

Fraction Remaining = e to the power of $(-0.693 * \text{DecayTime} / \text{Half-life})$

K.2.2 Unknown Isotopes

Activity calculations for waste activity with unknown composition are based upon the modeling of that waste according to either the MFP or MAP factor ratios for Isotope 19 which represent the mixture of transuranic beta and gamma radiation emitters usually found in MFP or MAP wastes, respectively, being stored or disposed of in the burial grounds. Waste is characterized by either the MAP factors or the MFP factors depending on the value of RDET_WASTE_MAKEUP for the container of waste.

The decay of unknowns is done by splitting the unknown into its constituent isotopes by using the MAP or MFP factors as appropriate, then decaying each isotope individually as for known isotopes, then recombining the remainder. The added complexity is required because the various isotopes decay at different rates.

For purposes of calculating the decay of unknown curies for MFP isotopes Y-90, RH-106 and BA-137M (or MAP ISOTOPE BA-137M) the half-life of their respective parent isotopes: SR-90, RU-106, CS-137 is used. This allows the implied presence of daughter products to be correctly figured in the decayed unknown, and allows individual isotope entries of Y-90, RH-106 and BA-137M to use their actual (and much shorter) half-life in the Decay Values Isotope records.

K.2.3 Unknown Isotopes Generated Offsite

Due to lack of data to the contrary, it is assumed that unknowns generated offsite were measured for activity at the time they were generated. No calculations to allow for a difference are required.

K.2.4 Unknown Isotopes Generated Onsite

For onsite waste, a knowledge of processing history tells us that waste sometimes was stored for extended periods between the actual generation of the waste (at which time it would have conformed to the definition of either MAP or MFP) and the time the containers were measured for total activity. During this period the waste would have changed composition due to the various rates of decay of the radioactive components of the waste. The fraction of the waste made up of long-half-life isotopes would increase while the fraction of the waste made up of short-half-life isotopes would decrease. To compensate for the interim storage periods, the MAP and MFP factors are decayed from an assumed waste generation date to the waste acceptance date, allowances for daughter products are calculated and

added in, the factors are normalized, and then used as above to calculate the portion of an unknown remaining at the period ending date.

The following assumptions are made about interim storage periods for onsite waste.

Unknowns Characterized as MAP

Acceptance Date	Assumed Creation Date
Day 1 - 12/31/84	Acceptance Date
01/01/85 and on	01/01/85

Unknowns Characterized as MFP

Acceptance Date	Assumed Creation Date
Day 1 - 12/31/72	Acceptance Date
01/01/73 - 12/31/82	01/01/72
01/01/83 - 12/31/85	01/01/82
01/01/86 - 12/31/86	mm/dd/83
01/01/87 - 12/31/87	mm/dd/75
01/01/88 and on	mm/dd/86

where mm/dd represents the month and day of the acceptance date.

Notes

From the old DECAYDUMP function:

The following data is extracted from SWITS tables and placed in operating system files outside Oracle.

From the SYSTATUS record: STS_DECAY_DT

From the ISOTOPE Table where ISO_UNIT = 'CI' and ISO_NUM <> 19: ISO_NUM, ISO_DTR_ISO, ISO_DTRPRD_FACTR, ISO_HALF-LIFE, ISO_MAP_FACTR and ISO_MFP_FACTR, except that the half-life of a daughter product is set to that of its parent.

From the WASTE Table: every unique value of CON_TSD_ACCEPT_DT

From the join of the WASTE, ISOQTY, and ISOTOPE Tables where ISO_UNIT = 'CI' and RAD_ISO_NUM <> 19: every unique value of the combination of CON_TSD_ACCEPT_DT and RAD_ISO_NUM plus

From the Cartesian join of the WASTE and ISOTOPE Tables where CON_PKG_ID matches a join of the ISOQTY and RADDETAIL Tables where RDET_WASTE_MAKEUP = 'A' and RAD_ISO_NUM = 19: every unique value of the combination of CON_TSD_ACCEPT_DT and ISO_NUM.

From the old DECAYLOAD function:

Outputs shall consist of the Decay Values Mixture Table and the Decay Values Isotope Table. These tables contain the factors by which the as-deposited activities of both unknowns and specific isotopes are multiplied to obtain current activities.

In addition to the amount of an unknown remaining after decay, it is also useful in the reporting process to know the portion of the original unknown which is currently composed of Cs-137, Ru-106, and Sr-90.

Cs-137 occurs in both MAP and MFP so two factors are calculated for that isotope. The other two isotopes occur only in MFP so only one factor is calculated for those. One set of factors is calculated for waste originating on-site, and another set for waste originating off-site. All these factors are loaded into the Decay Values Mixture Table and are unique for any given day.

ISO DECAYCALC Unknown

Function returning percentage of remaining isotope over time.

Description

This relatively simple algorithm does not address the decay of Mixed Fission Products or Mixed Activation Products.

Notes

The SQL function dkcalc

Used to decay one isotope across time.

```
create or replace function dkcalc
(start_date in date, end_date in date, half_life in number)
return number is
--
-- calculate the fraction of an isotope remaining after decay from
-- start_date to end_date, with a half-life of half_life
--
lambda number;
--
begin
if start_date >= end_date or half_life <= 0.0 then
return 1.0;
else
lambda := -0.693 * (end_date - start_date) / half_life;
if lambda < -180.0 then
return 0.0;
else
return exp (lambda);
end if;
end if;
end;
/
```

3.1.9 ENTER RADIOACTIVE CLASSIFICATION

M0X3 Classification of containers based on their radioactive components.

Description

Module describing all of the calculations and business rules necessary for RAD waste management.

Notes

Requirements per Mark 9/3/99:

- (1) External Programs: The RADCALC program will be used to perform DOT-specific (shipping) calculations for material within SWITS, and we need to support the import / export of isotope records by package between the systems. Ed Reed will review RADCALC. SWITS will not perform the DOT-calculations. The CDS II worksheet will live on, but the need for it will go away once SWITS has been re-engineered.
- (2) Scope of Work: SWITS will calculate and store values for all of the defined RAD calculations. These totals will be protected from update.
- (2A) Rules for Recalculation of Totals: The RAD totals for a package will be recalculated automatically by SWITS if the isotope records, weight or volume are changed, up until the package gets a TSD accept date. Once accepted by a TSD, the RAD totals will only change if a "Recalculate" function is manually triggered.
- (3) Handling Special Cases: RAD calculations currently based off of the package weight and volume should be moved off to separate (new) fields. The new "RAD calc" weight and volume would default to the package weight and volume, but could be modified as needed to address the LLW/TRU and Waste Category (1,3) management discrepancies in the current system, presently addressed by allowing override access to the RDET_SWTYP_CD and RDET_WASTE_CAT fields.
- (4) Add a new "decay date" field to indicate the date at which the isotope quantities were determined for the package, not the date of last update or re-calculation.
- (5) Darlene will determine whether we still need to do the EP-125 Trench RAD Inventory Report.
- (6) Differences in RAD totals between SWITS and CDS II or RADCALC will be resolved by policy, not by the application. The general rule is that differences will not be significant unless a package is close to a LLW/TRU or Waste Category Limit.
- (7) Other Items: Mark Ellefson (08/24/99) the Class C designation is going away. SWITS does not need to support it in the future. There are no time-dependent calculations in Classification.

(8) All inputs will be in curies, not in grams or curies. We may add a new "grams" field, which could be populated by dividing curies by a gram conversion factor. Walt Josephson will provide guidance on how we can convert the legacy records to be reported in curies.

(9) Handling Parent / Daughter Isotope Chains: The input form will make it clear that an entry is for an individual nuclide or a chain. Reported quantities will always be by isotope, not by chain.

Resolved Issues: The R343 and R555 reports do not use the stored values when they report on FGE. They run their own calculations. Should these use the stored values? - Calculations will be shared: added fields to store Isotope Grams and CPS container type so that calculations can be done more easily.

Needed new SWITS fields and data to support Robin Bashore:

1. CPS container type (default value is 1, currently 1-9 and expect at least 1 more) - Added CPS container type code to RADDETAIL table.
2. Uranium limit fraction -
3. Specific container type code and dimensions for the WIPP Standard Waste Box (SWB) (data change)

M0X3.01 RADCALC: DOT Rad Waste Calculations

Description

The RADCALC program is approved for calculating the values of radioactive packages used in shipping.

It is a requirement that this program interface with SWITS.

Notes

RADCALC performs DOT calculations, decay calculations, and gas generation calculations for rad shipments.

The tables in RADCALC are kept current and approved for DOT shipment.

There are legal ramifications if the DOT calculations are not performed correctly and this leads to shipping improper or improperly-packaged waste.

Outputs decayed source in ASCII file.

M0X3.02 CDS-II: Isotope calculations spreadsheet

Description

Used to perform various calculations on radioactive isotopes.

Maintained by Mark Ellefson.

It is not necessary to interface this program's input or output with SWITS.

Offsite generators use this to submit data for waste bound for Hanford.

Does some calculations on Mobile Radionuclides, ...

M0X3.03 Hanford Site Solid Waste Acceptance Criteria HNF-EP-0063

Description

The source of calculations for the classification process. As agreed upon 7/27/99 by Mark Ellefson et al., this is the only source for calculations within SWITS. If there is a conflict between 0063 and some CFR or DOE document, the 0063 takes precedence.

M0X3.03.01 Enter or Update RAD ISO Data

The container volume, waste weight, isotopes and their quantities are entered or updated for a waste package, triggering a variety of calculations in SWITS.

The CPS container type is determined externally, and, if applied, prints on the barcode fissile label.

The Uranium Limit Fraction is a number (less than 1), multiplied by the Total FGE to adjust total FGE downward based on process knowledge.

U-Limits only apply to packages containing Uranium isotopes.

M0X3.03.01.01 Calculate Dose Equivalent Curies (DE Ci)

Description

Calculation of DE-Ci is a method of normalizing the exposure risk of various radionuclides. The value is calculated from the package RAD inventory, and the total stored in the database.

Notes

From HNF-EP-0063:

A.9. CALCULATING DOSE-EQUIVALENT CURIES

DE-Ci limits are established for certain TSD units as part of the safety basis. Calculation of the DE-Ci of a waste container is performed in the following steps:

IN SWITS:

Convert Gram Quantities to Curies, if required:

$\text{Curies} = \text{RAD_QTY} * \text{ISO_CONV_FACTR}$

Multiply the activity (in Ci) of each isotope in a given container by its respective DE-Ci correction factor from Table A-1

$\text{SUM of RDET_TOT_DE_CI} = \text{RAD_QTY} * \text{ISO_DE_CI_FACTR}$ for each isotope.

Add the resulting values to obtain the total DE-Ci of the package.

SWITS Excludes some Packages from DE-Ci reporting

(1) If the RDET_DE_CI_FLAG = 'Y', pkg is excluded.

(2) If RDET_TOT_DE_CI < CL_DE_CI_THRESHOLD, pkg is not reported.

M0X3.03.01.02 Determine Mobile Radionuclides

Description

The quantity of each radionuclide is compared against an isotopic limit. If the quantity exceeds the threshold, the package is flagged for stabilization considerations.

Notes

From HNF-EP-0063

A.8. MOBILE RADIONUCLIDE REPORTING

This is a simple comparison of the concentration of each mobile radionuclide (3H, 14C, 36Cl, 79Se, 93Mo, 99Tc, 129I, 187Re, Total U, and 237Np) against its respective reporting value from Table A-2.

M0X3.03.01.03 Determine Criticality / Fissile Gram-equivalents (FGE)

Description

Calculation to determine the risk of a criticality based on the quantity of fissionable material in a package.

Notes

From HNF-EP-0063.

A.2. CALCULATION OF PLUTONIUM-239 FISSILE GRAM EQUIVALENCE

Multiply the gram quantity of each isotope listed in Appendix B, Table B-1, by its respective FGE conversion factor. Sum each of the resulting values to obtain the total FGE.

Resolved from 7/27: The user will need to maintain an FGE trigger limit that can be printed on reports. This limit is against a facility, quadrant, container, etc. The trigger limit is a manual decision point, not related to reporting. It related to CPS container type, but only type 1 packages are relevant. The FGE of a package must be 1 or greater to be considered fissionable. If the FGE is 100 or greater, the designator must determine if the fissionable material occupies 20% or less of the volume.

Manual input of RDET_TOT_PU_FGE will be blocked following redevelopment.

M0X3.03.01.04 Combustibility for Low Level Burial Grounds (ISB Limits)

Description

The Interim Safety Basis (ISB) calculation for a package involves comparing a sum of fractions value derived from its isotope inventory against a user defined threshold. The outcome of ISB limit exceeded / not exceeded by package is stored in the field RDET_EXCEED_ISB_LIM as 'Y' or NULL. The calculated value is not stored in SWITS.

Notes

From HNF-EP-0063

A.7. INTERIM SAFETY BASIS CALCULATIONS FOR LOW-LEVEL BURIAL GROUNDS

Determine the appropriate set of limits from Table A-2 (i.e., noncombustible containerized waste or combustible containerized waste)

Divide the concentration of each radionuclide by its respective limit

Add the resulting values to form a sum of fractions. If the sum of fractions is less than or equal to 1, the waste lies within the ISB limits. If combustible waste exceeds the combustible waste limit, but does not exceed the noncombustible waste limit, the WMH acceptance organization can perform an evaluation to determine whether segregation or stabilization can be used to mitigate the combustibility hazard. The noncombustible waste limit cannot be exceeded.

SWITS

Convert Grams to Curies, if necessary:

Curies = RAD_GM_QTY * ISO_CONV_FACTR

If package exceeds ISB limits, RDET_EXCEED_ISB_LIM is set to 'Y'

ISO_COMBUST_LIM

ISO_NONCOMBUST_LIM

cb_lim := :rad_qty * :p8_conv_factr / :p8_cb_lim
/ :con_cntr_vol;

nocb_lim := :rad_qty * :p8_conv_factr / :p8_nocb_lim
/ :con_cntr_vol;

Notes:

Currently this function applies only to the Low Level Burial Grounds.

The users have set up an ISB limit that can be printed on a report. SWITS calculates the value for the package, then prints the value for the package and the limit. ISB limits vary by facility. At present the value only applies to the LLBG. For TRU isotopes, the quantity is multiplied by 1 million and divided by the waste weight. If the result exceeds 100, the limit flag is NULL. For non TRU isotopes, an internal calculation (complicated) is launched based on the value of RDET_COMBUST. Leave this until design!

This flag field is displayed on the U101 screen + reports R310 and R356 (T-Plant inventory)

M0X3.03.01.05 Plutonium Equivalent Curies (PE Ci)**Description**

This calculation is required to ship material to WIPP. However all of the data entry into WIPP is hard-copy. SWITS will continue to store PE-Ci, but will not calculate it. Decision by Mark Ellefson et. al 7/27/99 is not to make SWITS WIPP-compliant

Notes

The PE-Ci calculation is performed as specified in the WIPP waste acceptance criteria (DOE/WIPP-069, Appendix A).

M0X3.03.01.06 Calculate Thermal Power.**Description**

Thermal power is the sum of the heat of decay of all radionuclides in the waste. SWITS will calculate and store the this value.

Notes

From HNF-EP-0063

A.3. CALCULATION OF THERMAL POWER

The concentration of each radionuclide (expressed in curies per cubic meter) is multiplied by the heat of decay for that nuclide from Table A-1, yielding the heat of decay for each in units of watts per cubic meter.

M0X3.03.01.07 Determine TRU activity (TRU or Low Level Waste)**Description**

TRU determination is based on the sum of the specific activity of the alpha-emitting radionuclides having half-lives greater than 20 years. These radionuclides are identified by footnote d in Table A-2 (of HNF-EP-0063). If the total alpha specific activity exceeds 100 nanocuries per gram, the waste is TRU.

Notes

The method of calculation is defined in HNF-EP-0063, Appendix A.1, TRANSURANIC WASTE DETERMINATION. This appendix also lists some conditions where additional material may be included in the waste weight. The SWITS formula is

$$\text{total_tru_ci} * 1.0\text{e}6 / \text{:con_waste_wgt} > 100$$

Where $\text{total_tru_ci} = \text{sum of RAD_QTY} * \text{ISO_CONV_FACTR}$ for each isotope. If $\text{total_tru_ci} > 100$, set $\text{RDET_SWTYP_GROUP} = \text{'TRU'}$, otherwise, set $\text{RDET_SWTYP_GROUP} = \text{'LLW'}$

For a waste package, examine the Isotope record. Calculate the contribution of Transuranic Isotopes (those stored in 'Grams' vs. Curies, where $\text{ISO_TRUCONT} = \text{'Y'}$) by multiplying the gram amounts by the iso conversion factor. Sum the results for all TRU isotopes, multiply by 1 million and divide by the waste weight. If the result exceeds 100 (nCi/g), the waste type is 'TRU', otherwise it is 'LLW'.

M0X3.03.01.08 Determine Waste Category 1 or 3 (LLW only)**Description**

The waste category (I,III) determines the handling procedures for a waste package. Applies to Low-Level waste only.

Notes

The internal volume of the container is used for the calculations. This size may be overridden.

From HNF-EP-0063.

A.4. CATEGORY 1 DETERMINATION

The concentration of each nuclide (expressed in curies per cubic meter) is divided by its respective Category 1 limit (Table A-2). The resulting values are added to form the sum of fractions. If the sum of fractions is less than or equal to 1, the waste is Category 1. If the sum of fractions exceeds 1, the waste is greater than Category 1, and the Category 3 determination must be performed to classify the waste.

A.5. CATEGORY 3 DETERMINATION

Category 3 determination is performed in the same way as the Category 1 calculation, only using the Category 3 limits from Table A-2 as follows: The concentration of each nuclide (expressed in curies per cubic meter) is divided by its respective Category3 limit from Table A-2. The resulting values are added to form a sum of fractions. If the sum of fractions is less than or equal to 1, the waste is Category 3. If the sum of fractions exceeds 1, the waste is greater than Category 3.

Calculations in SWITS

Gram quantities are converted to curies if required:

Curies = RAD_QTY * RAD_ISO_CONV_FACTR.

Divide each isotope quantity by the isotope CAT 1 and CAT 3 limits, summing results to create 2 "sum of fractions" values for the package. Note: these intermediate result are not stored in the database.

Next, Compare the fractional sums

SUM of (RAD_QTY / ISO_CATEGORY_1_LIM)

and SUM of (RAD_QTY / ISO_CATEGORY_3_LIM) with the CON_CNTR_VOL.

If the sum of fractions cat 1 is < CON_CNTR_VOL then RDET_WASTE_CAT = WC1, if fractions cat 1 > CON_CNTR_VOL, waste category is WC3, if CON_CNTR_VOL > cat 3 fraction, the waste category is GTWC3.

M0X3.03.02 Perform Unstored RAD Calculations**Description**

Describes RAD calculations that are displayed on reports, but will likely not be stored in the database.

M0X3.03.02.01 Calculate Uranium Enrichment**Description**

Uranium Enrichment = Grams of U-235 divided by the sum of the grams of all Uranium Isotopes, (converted to %). Currently implemented in the FISSILEINV_ISO view. There is a current reporting threshold of 72%; packages below this level are not reported for total grams Uranium or U-235.

M0X3.03.02.02 Calculate FGE less U-235**Description**

Total FGE minus FGE for U-235

M0X3.03.02.03 Calculate U-235 FGE**Description**

Sum of U-235 in curies, multiplied by its FGE conversion factor. Available from the FISSILEINV_ISO view. Value is reported only if the package enrichment is at or above 72%.

M0X3.03.02.04 Calculate Total FGE**Description**

Sum of fissionable isotopes in curies, multiplied by their respective FGE conversion factors. The current total for a package is available from the FISSILEINV_ISO view. In practice, this value should be the same as the PU-FGE stored as RDET_TOT_PU_FGE.

M0X3.03.02.05 Sum Total Grams of Uranium**Description**

Sum the mass of all Uranium Isotopes. At present, the sum is reported only if the enrichment is 72% or greater.

M0X3.04 Classification Reporting**Description**

Contains the SWITS forms and reports required to support classification activities.

M0X3.04.01 SWIR303 Dose Equivalent Curie Report Screen**Description**

CWC Dose Equivalent Curies Report. Displays the packages within a chosen CWC Facility and/or Quadrant that exceed a DE-Ci threshold value for that storage location. The final page of the report displays the total DE-Ci selected by facility / quadrant. Packages below the threshold are excluded from the report, along with specifically excluded packages, where the RDET_DE_CI_FLAG is 'Y'.

PE-Ci (Plutonium Equivalence) was removed from the report in April '97.

Business users: TSD OPERATIONS, FULL READ ONLY

M0X3.04.02 SWIR329 Curie Limits for Central Waste Complex Report Screen**Description**

Summarizes the number of containers, total Plutonium Fissile Gram Equivalence (Pu-FGE), and total DE-Ci for each facility / unit defined as CWC, where the individual package exceeds the facility DE-Ci threshold value. A warning message is displayed if the facility / unit total DE-Ci value exceeds 90% of the DE-Ci limit for that location. Note that PE-Ci was removed from the report in April of '97.

Notes**Element Names**

Building	CON_LOCN_FACIL_ID
Quadrant	CON_LOCN_SECTION
Count	COUNT(CON_PKG_ID)
DE-Ci Limit	CL_DE_CI_LIMIT
Total PU-FGE	SUM(RDET_TOT_PU_FGE)
Total DE-Ci	SUM(RDET_TOT_DE_CI)
Optional Msg:	'SUM IS OVER 90% OF LIMIT' Message displayed when SUM(RDET_TOT_DE_CI) >= CL_DE_CI_LIMIT

User Selection: None

Data Selects: RDET_TOT_DE_CI >=
CL_DE_CI_THRESHOLD for the Facility/ Quadrant the package is in.

RDET_DE_CI_FLAG <> 'Y'

Sort Sequence: CL_FACIL_ID, CL_SECTION

Schedule: n/a

Frequency: As required

Volume: 3 pages

Totals: COUNT (by CL_FACIL_ID, CL_SECTION) /rpt

RDET_TOT_PU_FGE (by CL_FACIL_ID, CL_SECTION) /rpt

RDET_TOT_DE_CI (by CL_FACIL_ID, CL_SECTION) /rpt

Special Tasks: The TEST Field conditionally prints the warning message "SUM IS OVER 90% OF LIMIT" whenever the total DE-Ci count for a building/section exceeds the building limit in CURIELIMIT.

Page Break: As required

Requestor/Org Name: Sue Stitt, SWO

Special Form/Font: hplsn

Report Distribution: 1 copy - Internal Use Only

Business users: TSD OPERATIONS, FULL READ ONLY

M0X3.04.03 SWIP343 Pop Up for Facility Fissile Inventory SWIR343 Screen

Description

Pop-up for the Facility Fissile Inventory Report. Parameters include a TSD date range and location facility, location section, location unit, and/or location module, or package ID.

Entity Note

Validate Date Range

=====

DEFINE PROCEDURE

```
NAME = VALIDATE_DATE_RANGE
DEFINITION = <<<<
PROCEDURE VALIDATE_DATE_RANGE (DATEFROM IN DATE, DATETO IN DATE) IS
BEGIN
  IF DATEFROM > DATETO THEN
    GET_ERR_TEXT('E078');
    MESSAGE(:GLOBAL.ERR_TEXT);
    GO_FIELD(:SYSTEM.CURSOR_BLOCK||'.DATE_FROM');
    raise FORM_TRIGGER_FAILURE;
  END IF;
END;
```

Pop Up for Facility Id

=====

```
select facil_id into :swip880.facil_id from facility, tsdfacil where

    facil_id = tfac_facil_id and tfac_class in ('CWC','224T') order by 1
```

Pop Up for Location Unit

=====

```
select distinct unit_unit into :SWIP880.LOCN_UNIT from facunit where unit_facil_id like :SWIP880.FACIL_ID order by 1
```

```
select distinct con_locn_section into :SWIP880.locn_section  
from waste  
where con_locn_facil_id like :SWIP880.facil_id  
and con_locn_unit like nvl(:SWIP880.locn_unit,'%') order by 1
```

Pop Up for Module

```
select distinct con_locn_module into :SWIP880.locn_module from waste  
where  
    con_locn_facil_id like :SWIP880.facil_id  
    and con_locn_unit like nvl(:SWIP880.locn_unit,'%')  
    and con_locn_section like nvl(:SWIP880.locn_section,'%') order by 1
```

Notes

EDITS, REQUIRED FIELDS, and DEFAULTS:

User may select by package location (including all "CWC" facilities) or specific package(s), but not both.

Selecting by Package Location -

A Facility is required when selecting by package location. Must be "CWC" or a location facility which is a member of TSD facility class 'CWC' or '224T'. Wildcard (%) pattern matching supported.

Unit Optional - Must be a valid unit for the facility entered. This edit forces the user to not enter a unit when "CWC" is entered for the facility. Wildcard (%) pattern matching supported.

Section Optional - Must be a value used in the Waste table for the specified facility and unit, if entered. This edit forces the user to not enter a section when "CWC" is entered for the facility. Wildcard (%) pattern matching supported.

Module Optional - Must be a value used in the Waste table for the specified facility and unit or section, if entered. This edit forces the user to not enter a module when "CWC" is entered for the facility. Wildcard (%) pattern matching supported.

Selecting by Specific Package(s) -

Package ID is required when selecting by specific package(s). Must be a valid record in the Waste table. Wildcard (%) pattern matching supported.

TSD Accept Dates Optional for selecting by package location or by specific package(s). Must be valid dates, with Through date later than From date. When From date is specified and Through date is blank, the report uses the From date in place of a range. If no dates are specified, then the range 01/01/1940 through 12/31/2039 is used.

ADDITIONAL PROCESSING:

A WHERE clause is constructed in the KEY-COMMIT trigger of the block containing the Package Location or Specific Package(s) selection criteria. The WHERE clause is passed to the report to be used as a lexical parameter in the report query. The TSD Accept dates are not included in this clause, however, and must be used as bind parameters in the report query.

WHERE clause for "CWC" facility selection -

```
AND CON_LOCN_FACIL_ID IN (SELECT TFAC_FACIL_ID FROM TSDFACIL WHERE  
TFAC_CLASS = 'CWC')
```

WHERE clause for Package Location selection -

```
AND CON_LOCN_FACIL_ID LIKE 'facility'  
AND CON_LOCN_UNIT LIKE 'unit' (if Unit is specified)  
AND CON_LOCN_SECTION LIKE 'section' (if Section is specified)  
AND CON_LOCN_MODULE LIKE 'module' (if Module is specified)
```

WHERE clause for Specific Package(s) selection -

```
AND CON_PKG_ID LIKE 'package ID'
```

Business users: TSD OPERATIONS, FULL READ ONLY

M0X3.04.03.1 SWIR343 Facility Fissile Inventory Report Screen

Description

The Facility Fissile Inventory (SWIR343) report provides a list of fissile isotopes where the packages are identified as fissile material. The user may select by package location information (facility, unit, section, and/or module), package ID, or all packages in CWC facilities. When selecting by package location the facility must be a CWC or 224T TSD facility. T-Plant will be sorted according to the UNIT_RPT_GROUP field in the FACUNIT table.

Notes

Data Elements

```
Facility CON_LOCN_FACIL_ID  
Unit CON_LOCN_UNIT  
Section CON_LOCN_SECTION  
Module CON_LOCN_MODULE
```

Tier Pos CON_LOCN_TIER_POS
Tier Lvl CON_LOCN_TIER_LVL
PIN # CON_PKG_ID
Fissionable Isotopes
 Name ISO_NAME
 Quantity FISO_PU_FGE
Uranium Isotopes
 Name ISO_NAME
 Quantity RAD_GM_QTY

Sort Sequence: CON_LOCN_FACIL_ID
 CON_LOCN_SECTION
 CON_LOCN_MODULE
 CON_LOCN_UNIT
 CON_LOCN_TIER_LVL
 CON_LOCN_TIER_POS

User Selection: CON_TSD_ACCEPT in date range (default date range if not specified)
 and
 CON_LOCN_FACIL_ID,
 CON_LOCN_UNIT,
 CON_LOCN_SECTION, or
 CON_LOCN_MODULE
 or
 TFAC_CLASS = ?CWC?
 or
 CON_PKG_ID
 (see Programmer Notes)

Data Selects: Packages are radioactive in TSD Custody (RADWASTE view and TSD date range) and
 fissile material (FISSILEINV_PKG view).

Totals/Calculations: Per package - total fissionable FGE, total uranium quantity, and enrichment
 percentage.

Programmer Notes: All user selection parameters, except for the TSD date range, are passed to this
report in a WHERE clause constructed by the SWIM008 pop-up SWIP880. The table fields specified in
the WHERE clause vary depending upon what the user enters as the data selection - a specific package,
all packages in facilities of TSD facility class ?CWC?, or packages in a particular facility, unit, section,
and/or module. See SWIP880 pop-up documentation for additional details.

Fissile Material Selection: The rules in determining which packages are fissile material are maintained
in the FISSILEINV_PKG view. Reference the database view documentation in appendix H for details.

Calculation of Enrichment Percentage: U-235 Isotope quantity divided by the total quantity of Uranium isotopes.

Business users: TSD OPERATIONS, FULL READ ONLY

M0X3.04.04 SWIR357 DE Curie Report for T Plant Screen

Description

Reports Dose Equivalent Curies (DE-Ci) by package ID at T Plant facilities. Waste packages are grouped by UNIT_RPT_GROUP, a new field requested by Robin Bushore.

Unlike the R303 and R329 CWC inventory reports, this report does not use a DE-Ci package reporting threshold value. Dump Truck and Train Tank Cars containing waste (container types 'DT' and 'TC' are excluded.

Notes

Element Names

Facility CON_LOCN_FACIL_ID
Unit CON_LOCN_UNIT
Pkg Status CON_PKG_STATUS
Package ID CON_PKG_ID
Waste Type CON_PWTYP_CD
Total DE-Ci RDET_TOT_DE_CI

User Selection: None

Data Selects: Radioactive Waste (via RADWASTE view)

CON_LOCN_FACIL_ID is 'TPLT' TSD Facility Class on TSDFACIL table
CON_PKG_STATUS is not 'R', 'S', 'U', 'V' or 'Y'
CON_CNTYP_CD is not 'DT' or 'TC'

Sort Sequence: Facility, Unit, Pkg Status, Package ID

Schedule: None

Frequency: As requested

Volume: 10 - 15 pages

Totals: Total DE-Ci for Facility

Page Break: Facility

Requestor: Margaret Vasquez, WMH - Requirements Management

Special Form/Font: hpstd

Developer Notes: Modifications to this report may also require changes to SWIR358. The detail information on this report is summarized by SWIR358.

Business users: TSD OPERATIONS, FULL READ ONLY

M0X3.04.05 SWIR358 DE Curie Summary Report for T Plant Screen

Description

Companion report to R357. This report provides total Dose Equivalent Curies (DE-Ci) for T Plant facilities, while R357 provides package level detail.

08/18/99: Robin Bashore: Needs a new field to group T-Plant facilities / units into reporting units.

Notes

Can be ported to the new SWITS with a provision to separate specified facility / unit combinations into reporting "segments"

Business users: TSD OPERATIONS, FULL READ ONLY

M0X3.04.06 SWIP555 Data Selection Pop-up Form for SWIR555 Screen

Description

Pop-up form to support the printing of fissile labels for containers. Optional parameters include a Facility, Quadrant, Module, Unit (Trench), Tier Level, Tier Position, Portfolio # and Package ID.

Business users: TSD OPERATIONS, FULL READ ONLY

M0X3.04.06.1 SWIR555 Barcode Fissile Label Report Screen

Description

Replaces the SWITS R555 (Fissile Label) report. Operations (SWO) personnel at the Central Waste Complex (CWC) and burial grounds trailer use these labels to indicate Uranium equivalence present in radioactive and mixed wastes.

Notes

08/18/99: processing logic is similar to the R343 report. See Robin Bashore for details

Simple Rule

Prints Fissile Labels for RAD / Mixed Waste containers by TSD location (Facility, Quadrant, Module, Tier Level, Tier Position) or by PIN #. Jobs are sorted by Module, Tier Level, Tier Position, then by PIN # to facilitate labeling of existing TSD inventories.

Business users: TSD OPERATIONS

3.1.10 ENTER ADMINISTRATIVE DATA**SWIU108 Repackaging Log**

Notes

12/2/99 - DL Hagel requested that the user not be able to re-label a package - remove this functionality from this screen. A package is relabeled using the SWIE100 function.

SWIU400 Isotope Table Screen

Description

Used to maintain the data relating to radioactive solid waste isotopes. The Isotope Table contains information including isotope number, name, unit, factors and classes.

Notes

ISO_MAP_NAME and Must be both blank or both
ISO_MAP_FACTR non-blank.

ISO_DTR_ISO and Must be both blank or both
ISO_DTRPRD_FACTR non-blank.

ISO_UNIT Must be CI or GM. Validate this field against the Miscellaneous Code Table using field name: ISO_UNIT.

ISO_NAME Required.

ISO_LOV Must be Y or N. Validate this field against the Miscellaneous Code Table using field name: YESNO

ISO_TRUCONT Must be Y or N. Validate this field against the Miscellaneous Code Table using field name: YESNO

LOV for ISO_UNIT
SELECT CODE_VALUE, SUBSTR (CODE_DESCR, 1, 10)
FROM CODECHECK
WHERE CODE_FIELD_NAME = 'ISO_UNIT'
ORDER BY 1

Business users: SWITS ADMINISTRATION

SWIU401 Maintain Waste Code tables Screen

No Text

Business users: SWITS ADMINISTRATION

SWIU401A Maintain Days to Ship Deadline

Description

Used to maintain the combinations of Regulations and the associated number of days that will be added to the accumulation date to determine the shipment deadline date.

SWIU401B Secondary Waste Type Code Table

Description

The secondary waste type code specifies the storage location and method used at a TSD to dispose of a RAD or MIXED waste package. It is not required until the package reaches 'T' status, or when the waste falls under control of a TSD. It is included on the annual EP-125 inventory report to satisfy a federal mandate.

SWIU401C Storage Category Table

Description

Update screen SWIU408 is used to maintain the Storage Category Table.

Notes

SCAT_CD Required.

SCAT_CATEGORY Required.

SCAT_616 Y or N are acceptable values. Yes (Y) will cause the value to be shown on the list of values for SWIU303 module location.

SWIU403 Define Company Screen

Description

Update screen SWIU403 is used to maintain a table containing information about all the applicable companies involved in handling solid waste. Companies that generate, transport, and dispose of solid waste are included in this table.

Notes

CMPNY_TYPE Required. Validate this field against the Miscellaneous Code Table using the field name CMPNY_TYPE. List of values (LOV) pop-up available.

CMPNY_LOCATION ON or OFF. Validate this field against the Miscellaneous Code Table using field name LOCATION. List of values(LOV) pop-up available.

CMPNY_STATE_CD Required. Foreign key to State Table. A list of values pop-up display with the State codes and names will be available on this field.

CMPNY_LOV Must be Y or N. Validate this field against the Miscellaneous Code Table using field name YESNO. List of values (LOV) pop-up available.

Business users: SWITS ADMINISTRATION

SWIU405 Maintain Facility Screen

Description

Update Screen SWIU405 is used to maintain the Facility Table. The table consists of the facility area location, identification, name of the location, and Machine Readable Code used for barcode identifier.

Notes

FACIL_ID Required.

FACIL_AREA Required.

FACIL_LOV Must be Y or N. Validate this field against the Miscellaneous Code Table using field name: YESNO

Change the U413 form so that phone number follows Facility Supervisor. Change the label on Phone to Facility Phone.

Business users: SWITS ADMINISTRATION

SWIU405A Maintain Facility Units**Description**

Both TSD Facilities and the Burial Grounds may be divided into more specific locations called Units. For buildings, a unit can mean a section or "quadrant" of a larger building (example, 2403Wx series buildings at the CWC), or a waste staging area / room within a facility (T-Plant 2706T BAY). For burial grounds, the unit specifies a trench number. DE-Curie inventory for buildings may be kept at the UNIT level or whole Facility level, but not both. RSU means "Retrievable Storage Unit"; if 'Y', the waste stored in the unit can be moved elsewhere.

Notes

UNIT_FACIL_ID Required. Foreign key to Facility Table. A list of values (LOV) pop-up display with the Facility ID and Facility Name will be available on this field. LOV pop-up and validation logic limits the records to those which have a 'Y' in the FACIL_LOV field.

UNIT_UNIT Required.

UNIT_DESCR Required.

UNIT_RSU Required. Default to 'N'. Validate this field against the Miscellaneous Code Table using field name YESNO. A list of values pop-up display will be available on this field.

UNIT_LOV Required. Default to 'Y'. Validate this field against the Miscellaneous Code Table using field name YESNO. A list of values pop-up display will be available on this field.

SWIU405B TSD Facility Info**Description**

This table formerly contained information about TSD facilities such as the address, phone number, contacts, and class. The purpose of this screen was to provide point-of-contact information for shippers and generators.

Notes

TFAC_FACIL_ID Required. Foreign key to Facility Table. A list of values (LOV) pop-up display with Facility ID and name will be available on this field. LOV pop-up and validation logic limits the records to those which have a ?Y? in the FACIL_LOV field.

TFAC_MFST_ADDR Required.

TFAC_SCHEDULER Required. Foreign key to Person Table matching PERS_ID. A list of values pop-up display with Person ID and Person Name will be available on this field, ordered by person's last name.

TFAC_SUPERVISOR Required. Foreign key to Person Table matching PERS_ID. A list of values pop-up display with Person ID and Person Name will be available on this field, ordered by person's last name.

TFAC_PHONE Required. Defaults to PERS_PHONE from the Person Table for the Facility Supervisor. If entered as p-nnnn, the data entered will be appended to 50937; otherwise the full phone number must be entered as aaapp-nnnn.

SWIU405C Maintain Curie Limits

Description

Maintain Facility or Facility / Unit DE-Ci inventory limits.

SWIU406 Container Type Table Screen

Description

The container type and description are assigned when a new container comes on the site, either by Site Warehouse Services or a generator (if the container is fabricated). Valid container types are listed in the DOT regulations, and/or the Washington State administrative code (WAC). A given container type may have one or more DOT container specifications. This relationship is currently stored in the SWITS DOTSPEC table.

The Container Type Table () is maintained by update screen SWIU406. It maintains the container type codes and container type descriptions.

From this screen you will also be able to associate DOTSPEC and CONSIZE with the CONTYPE.

Business users: CONTAINER MANAGEMENT, SWITS ADMINISTRATION

SWIU406A Container Size Description Table

Description

Used to maintain waste container size information. The Container Size Table is maintained by update screen SWIU411 (). It maintains the container size descriptions and container volumes.

Notes

- 1) Contains procedure 'calc_volumes'.
- 2) Contains trigger 'on-validate-field' on csz_unit.

- 3) Contains on-validate-field on csz_unit.
- 4) Contains on-validate-field on csz_lov.

Billing volumes (CSZ_BILL_VOL) are maintained by Strategic Planning organization (RA Barcot) in support of the Radioactive Waste Billing report. Updates to this attribute need to be limited to a new Billing role (proposed role name).

SWIU406B DOT Container Specification Table

Description

Maintains the Federal Dept. of Transportation Container specifications list. A DOT spec translates to physical and performance characteristics of a container, such as construction material, breaking strength, suitability to store oxidizers or corrosives, etc. A given container type may have multiple DOT Specifications.

Screen SWIU418 () is used to maintain the DOT Container Specification table.

Notes

- 1) On-validate-field trigger on field dot-cntyp-cd.

SWIU407 Maintain Physical Package Components

Description

Physical components apply only to RAD or Mixed waste packages. They are used to specify the kind and amount of void filler material(s) within a container vs. actual radioactive material for use when calculating the Transuranic dose rate of a container. The generator is responsible for entering this information, unless the container is repackaged or processed at a TSD.

SWIU409 Miscellaneous Codes TableScreen

Description

Maintains the CODECHECK table, a generic table used to store list of values and validation information in an easily extensible format.

This screen () maintains a table of miscellaneous codes used in the SWITS system (the CODECHECK table). In general, individual validation tables will be built for those codes which may assume more than ten values and for those codes for which additional data is required. This table covers all codes for which there are few valid values and no additional data (see Section 4.3.3.3).

REVIEW - The current SWITS allows the users to toggle on and off the use of capitals for each field on the screen. Perhaps that only the description should be allowed to toggle the case.

REVIEW - Trigger for field code_value, on-validate-field.

Notes

- 1) The current SWITS allows the users to toggle on and off the use of capitals for each field on the screen. Perhaps that only the description should be allowed to toggle the case.
- 2) Trigger for field code_value, on-validate-field.

Business users: SWITS ADMINISTRATION

SWIU410 Billing Support Screen

Description

Update screen SWIU410 is used to maintain the Charge Code and Forecast Table. This table is used to maintain a list of valid charge codes and forecast volumes by Fiscal Year, Waste Types, Company and Generator Group.

The charge codes are used by WMH to charge the appropriate generator group for waste handled by TSD facilities. Additionally, the forecast data is available for capacity planning.

Entity Note

Offsite WRM Number (cc_wrm_num) can be archived (R Barcot 9/14/99).

9/28/99 DLM - CC_WRM_NUM archived.

Sponsor Order Number (cc_spo_num) needs to remain however the values entered in FY 1999 and FY 2000 (?) are COA values. Values in this field will need to be moved to COA attribute if added (below).

Add new COA attribute to CHRGCODE entity? Values entered into the cc_spo_num for FY 1999 need to be moved to this proposed new entity. Need to determine if COA should be added to the unique identifier for CHRGCODE and if the con_coa, entered by the generators, should be validated against this field like charge code is today. Currently the con_coa is not edited and values are inconsistent with what is entered in the cc_spo_num. The COA value used for rad waste billing is different then other uses in SWITS (transportation, packaging?).

Notes

- 1) Allow form to add Rad and Haz waste.
- 2) There is a Pre-insert trigger on the block 'SWIU410M'.
- 3) There is an on-validate-field trigger on the field cc_swtyp_group.
- 4) Trigger on-validate-field exists on field cc_ggrp_id.
- 5) Trigger on-validate-field on cc_lov.
- 6) Trigger on-validate-field on cc_delay_bill_flag.

U410 and successor, when entering a charge code default the Delay Flag to No (No delay). ROB, 10/14/99.

Reference proposed new COA attribute in Entity Notes.

Business users: CHARGE CODE MANAGEMENT

SWIU410A Maintain Charge Codes and Forecast Information

No Text

SWIU410B Define Billing Periods

No Text

SWIU415 Person Table Screen

Description

Maintains personnel information. Persons may be waste generators, belong to waste generation groups, points-of-contact for facilities, shippers etc.

From this function you will also associate the person with a GENGROUP therefore creating a GENERATOR.

Notes

PERS_ID Automatically generated for a new person. The **PERS_ID** is a concatenation of the **CMPNY_ID** and a sequential number for the company.

PERS_NAME Required. Must be of the form "FM LAST" where the third character is a space. This is to allow sorting of names by last name.

PERS_CMPNY_ID Required. Foreign key to Company Table. A list of values pop-up display with the Company codes, company types, and names will be available on this field. List of values pop-up and validation edits limit the records to those which have a 'Y' in the **CMPNY_LOV** field.

PERS_MSIN Make MSIN Required ONLY for people with ONSITE companies.

PERS_STREET, **PERS_CITY**, **PERS_STATE**, **PERS_ZIP_CD** Make Street/City/State/Zip Required ONLY for people with OFFSITE companies. Default State to WA for ONSITE people (only fills if its NULL); if NULL and offsite company, fill in the **PERS_STATE** from the Company record.

PERS_CMPNY_TYPE Required. Entered automatically if the Company ID is selected from its list of values, otherwise must be a Company Type valid for the Company ID.

PERS_STATE_CD Required. Foreign key to State Table. A list of values pop-up display with the State codes and names will be available on this field. For new records, the default value is the same state as for the company entered in **PERS_CMPNY_ID** above.

CMPNY_ID Required to be the ID of a company for which **CMPNY_LOCATION** = 'OFF' and **CMPNY_LOV** = 'Y'.

A record may not be deleted from the Person table if that record is referenced in any other table, i.e., **TSDFACIL**, **SAMPLE**, **GENGROUP**, **GENERATOR**, ...

If a user is removed from SWITS, make sure that the related Generator record also has an end date.
Darlene Hagel, 10/7/99.

Business users: SWITS ADMINISTRATION

SWIU415A Generator Table**Description**

Maintains the Generator table. Generators are persons belonging to Generator Groups associated with Companies. The Generator Table contains information pertaining to identification and status of waste generators.

Notes

Person name is not enterable or updatable. It is automatically filled in from the PERSON table when data are displayed. It may be used for query purposes to search for names from PERS_NAME, with pattern matching allowed.

GENER_ID Required. Foreign key to Person Table. A list of values pop-up display with Person ID and Person Name will be available on this field, ordered by person's last name.

GENER_SHIPPER Must be Y or N. Validate this field against the Miscellaneous Code Table using field name YESNO.

GENER_GGRP_ID1 Required if GENER_SHIPPER is Y. Foreign key to Generator Group Table if entered. A list of values pop-up display with Generator Group and Name will be available on this field. The value "NO GROUP" is allowed only if GENER_SHIPPER is N.

GENER_GGRP_ID2 Foreign key to Generator Group Table if entered. A list of values pop-up display with Generator Group and Name will be available on this field

SWIU416 Maintain Generator Group Screen**Description**

Maintains the identification and status of waste generator groups. From this module People will be associated with generator groups, they will be called generators.

Gen Groups may have to questions/groupings that can be associated with the waste package there are three types: Comments, Dates and Yes/No. For comments you will be able to associate a list of valid values to be used when associating with the waste package.

Gen Groups may also have Org sources associated with them through this module also.

Notes

GGRP_CMPNY_ID and GGRP_CMPNY_TYPE. Foreign keys to Company Table. A list of values pop-up display with Company Code and name will be available on this field. Only those companies with Type = GEN and LOV = 'Y' will be displayed.

GGRP_PERS_ID Required. Foreign key to Person Table. A list of values pop-up display with Person ID and Person Name will be available on this field, ordered by person's last name. Name is displayed to right of ID field.

GGRP_APPRV_TRU Required. A list of values pop-up display with valid codes will be available on this field.

Business users: SWITS ADMINISTRATION

SWIU416A Define Generator Group Specific YN questions

Description

Define Generator-Group-Specific YN questions.

Waste comes from a generator group. For these waste records the questions defined here will apply.

SWIU416B Define Generator Group Specific Questions that result in a Date

answer

Description

Waste comes from a generator group. For these waste records the questions defined here will apply. The answer must be a date, e.g., "Date that the resin was removed."

SWIU416C Define Generator Group Specific Statements that may or may not have response

Description

Waste comes from a generator group. For these waste records the questions defined here will apply. Allows the generator to put in text about some aspect of the waste that only applies to his/her generator group. For example, "Telephone number of shift manager."

SWIU416C Define Valid Responses as Needed

No Text

SWIU416D Associate People with Generator Groups

No Text

SWIU417 Source Organization Table

Description

List of the organization codes or departments across companies. A given Generator Group may use one or several organization source codes.

Notes

A record may not be deleted if it is referenced from other tables, i.e. WASTE,

ORG_GGRP_ID Required. Foreign key to Gengroup Table. A list of values pop-up display with Generator Group ID and Generator Group will be available on this field.

ORG_LOV Must be Y or N. Validate this field against the Miscellaneous Code Table using field name: YESNO.

SWIU419 Maintain Dangerous Waste Number Table

Screen

Description

Maintain Dangerous Waste number reference table, DW NUM.

Notes

Dangerous waste numbers are required by both the State and Federal agencies as a method of identifying the regulated materials present in waste containers or waste streams.

A given container may have zero or more dangerous waste numbers associated with it. The sort order fields in SWITS are required to meet reporting requirements that DW numbers be sorted in a specific (non-alphabetic) way.

Business users: SWITS ADMINISTRATION

SWIU419A Maintain TC Limits

Description

Maintain reporting limits for D004 - D043 characteristic codes

Notes

Was numbered 2.9.4.6.1.1

SWIU419B Maintain Dangerous Waste Subcategories

Business Problem

According to Eric Muhammed, the current data model and interface for creating LDR's in SWITS is satisfactory. He is concerned however, that the generators may not be complying with an annual requirement to send the WDOE a "one-time Notice and Certification Letter". He supplied a sample document, and requested that we write a report to produce the letter whenever SWITS report R353 "Land Disposal Notification and Certification" is run. [12/2/99 - Reported to Darlene Hagel, who said she would look in to it.]

Description

Master list of subcategory codes applied to some dangerous waste numbers when performing LDR determinations.

SWIU420 Maintain Waste Components Table Screen

Description

Function to maintain the WASTECOMP and UNDERHAZCONST tables.

Business users: SWITS ADMINISTRATION

SWIU420A Maintain Underlying Hazardous Constituents

Description

Maintain the list of possible underlying hazardous constituents by waste component.

SWIU420B Associate Dangerous Waste Numbers

Description

Maintain the list of DW characteristics, U/P codes etc., associated with a chemical (by wastecomp ID)

SWIU420C Maintain Solvent Table**Description**

Maintain the SOLVENT table. Solvents are a subset of Waste Components that may be listed for LDR purposes based on the presence of F001 - F005 waste codes in the waste designation.

Notes

As a design issue, it has been requested that the whole list of possible solvents, with the appropriate F001 - F005 code be displayed when "spent solvents" are applicable to a waste.

SWIU426 Define Waste Streams Screen**Description**

Waste Stream maintenance table.

Referenced currently by the SDAR process, it will need to be re-designed.

Notes

STRM_CD Required.

STRM_ACTIVITIES Enterable and updateable only if STRM_WASTE_MIN = "Y". Must consist of three-character codes separated by single spaces, if entered.

STRM_DESIG_CD Validate this field against the Miscellaneous Code Table using field name STRM_DESIG_CD, if entered. A list of values pop-up display will be available on this field.

STRM_GENER_TREAT Validate this field against the Miscellaneous Code Table using field name STRM_MGT_CD, if entered. A list of values pop-up display will be available on this field. This field is forced null and bypassed when STRM_MANAGE_LOCN = 'OFF'.

STRM_INCREASE Enterable and updateable only if STRM_WASTE_MIN = "Y". Must be Y or N, if entered. Validate this field against the Miscellaneous Code Table using field name YESNO, if entered. A list of values pop-up display will be available on this field.

STRM_MANAGE_LOCN Validate this field against the Miscellaneous Code Table using field name LOCATION, if entered. A list of values pop-up display will be available on this field.

STRM_ORIGIN_CD Required. Validate this field against the Miscellaneous Code Table using field name STRM_ORIGIN_CD. A list of values pop-up display will be available on this field.

STRM_PERMIT Validate this field against the Miscellaneous Code Table using field name STRM_MGT_CD, if entered. A list of values pop-up display will be available on this field. This field is forced null and bypassed when STRM_MANAGE_LOCN = 'OFF'.

STRM_RECYCLED Enterable and updateable only if STRM
_WASTE_MIN = "Y".

STRM_REDUCE_QTY Enterable and updateable only if STRM_WAS
TE_MIN = "Y".

STRM_RESIDUAL_CD Enterable, updateable, and required only
if STRM_ORIGIN_CD = "v".

STRM_SRCE_LOCN Validate this field against the Miscellaneous Code Table using field name
LOCATION, if entered. A list of values pop-up display will be available on this field.

STRM_WASTE_MIN Required. Must be Y or N. Validate this field against the Miscellaneous Code
Table using field name YESNO, if entered. A list of values pop-up display will be available on this
field.

STRM_WDOE_CD Must consist of four-character codes separated by single spaces, if entered.

Business users: SWITS ADMINISTRATION

SWIU427 Nonconformance Code Table Screen

Description

A NonConformance is a defect or problem identified with the paperwork or physical condition of a waste package. These values are stored in the NONCOMCODE table. Data elements include the code, a description and an assignee code. The assignee is the type of reviewer that assigns the nonconformance code; possible values are 'E' = Data Entry Review, 'T' = Technical Review, 'O' = Operations Review, 'V' = Verification Review, 'R' = Receipt, 'G' = General Comments, and 'S' = Specialty Review. The data entry form sorts the data by Assignee, in the order of 'E','T','O','V','R'. Assignee types 'G' and 'S' are not sorted.

Notes

The requirements for Nonconformance verifications are more complicated than currently supported in SWITS. Mark Ellefson (SWEA) is the probable contact for more information.

Business users: SWITS ADMINISTRATION

SWIU430 Maintain Certification Statement Table Screen

Description

Maintain waste certification (LDR) treatment codes, descriptions and boilerplate text used to prepare the waste shipping certification letter sent to an offsite TSD.

Notes

Table data is referenced when creating an LDR using the U104 screen. Associated reports include R430 (Displays contents of LDR table), and R353 Land Disposal Notification and Certification Report (LDR).

Business users: SWITS ADMINISTRATION

SWIU432 Maintain WA Toxicity Screen

Description

Maintain the Washington State Toxicity Characteristic and Conversion Factors

Business users: SWITS ADMINISTRATION

SWIU433 Maintain Reactivity Table Screen

Description

Maintain a list of extended information pertaining to reactive waste components (D003). Sample values for D003 might include

- (1) Cyanide or Sulfide Bearing
- (2) Water Reactive
- (3) Unstable
- (4) Explosive

Business users: SWITS ADMINISTRATION

SWIU434 Maintain Compatibility Table Screen

Description

Stores shipping compatibility information.

Business users: SWITS ADMINISTRATION

SWIU435 Maintain Treatment Table Screen

Description

Maintain the Waste Treatment Type table

Business users: SWITS ADMINISTRATION

SWIU440 Profile Table Maintenance Screen

Description

The master function for Profile table maintenance. Leads to screens that let you make a new Profile entry, associate a Profile record with records in other tables, and modify a Profile record.

Business users: WMR, TSD REPRESENTATIVE, SWITS ADMINISTRATION

SWIU440A Create Profile

Description

Maintain the Profile table in SWITS.

This function creates the Profile.

A Profile may exist without having any Waste associated with it.

A Profile has an expiration date. The expiration date is known when the profile is created. The expiration date is set by the user when the profile is created.

Notes

The Profile table stores the Profiles that are used by radioactive waste.

A Profile has an expiration date entered when it is created.

A Profile may be revised. The revision number is created the same way that the WSRd revision number is created. The revision number should be a system-generated number.

SWIU440A1 Assign Person to Profile

Description

Maintain the link between an approved Profile and the person who will receive it.

The person who will receive the profile is not the person who will maintain the profile.

SWIU440A2 Assign Company to Profile

Description

Assign a company to a profile.

SWIU440A3 Assign WSRd to Profile

Description

Assign a WSRd to a Profile.

SWIU440A4 Associate Stream to Profile

Description

Assign a Stream to a Profile.

One Stream may be associated with many Profiles.

One Profile may be associated with many Streams.

Entity Note

Updates the Stream Profile table with the relationships.

Notes

SWITS is supposed to assist the user by narrowing the number of Streams that can apply to a Profile.

SWIU440B Edit Profile

Description

A Profile may be revised over time.

A revised Profile has a PROF_REV_NO.

Notes

A Profile may be revised.

The revision number is created the same way that the WSRd revision number is created.

The revision number should be a system-generated number.

SWIU440C Build revision number for Profile

Description

Function to build the revision number for the Profile.

Uses the same process logic as the WSRd Revision number.

SWIU441 Waste Specification Record Screen

Description

Used to enter and maintain Waste Specification Records and their revisions. WSRD's are used to identify wastes of known composition to engineering as a step in the shipping process.

Notes

Previously Form SWIU604

WSRD_NUM Required. Must be 3 characters.

WSRD_REV Not enterable or updateable. Determined from the maximum Revision Number in associated Revision records.

WSREV_VALID_DT Not enterable or updateable. Determined from the Valid Date in the latest associated Revision record.

WSRD_SCAT_CD Required. Foreign key to Storage Category Table. A list of values pop-up display with the Storage Category Code and Description will be available on this field.

WSRD_DESCR Required.

Business users: SWITS ADMINISTRATION

SWIU441A WSRD Revisions Screen

Description

Tracks revisions to WSRD's.

Notes

WSRD_NUM Not enterable or updateable. Taken from the line on which the cursor was positioned in the primary screen when the pop-up was activated.

WSRD_DESCR Not enterable or updateable. Taken from the line on which the cursor was positioned in the primary screen when the pop-up was activated.

WSREV_REV Not enterable or updateable. Computer generated to be the next available number.

WSREV_BY Required. Foreign key to Person Table. A list of values pop-up will be available on this field. Both the list and the validation will be limited to those persons identified as analysts in the PERS_ANALYST field of the Person Table.

WSREV_DT Required. Must be current date or before but not less than the date for the highest previous revision.

WSREV_DESCR Required.

ADDITIONAL PROCESSING:

When a new revision record is inserted, WSRD_REV in the WSRD record is updated to reflect the change.

When an existing revision record is deleted, WSRD_REV in the WSRD record is updated to reflect the change. Only the latest revision may be deleted.

Business users: SWITS ADMINISTRATION

SWIU441B Associate Storage Category

No Text

SWIU445 Maintain HIC's Screen

No Text

Business users: SWITS ADMINISTRATION

SWIU701 Error Message Table Screen

Description

This update screen () is used to maintain the Error Message Table, which consists of the data elements in the following matrix.

Notes

Screen Data Element Name	SWITS Database Data Element Name
Error No.	ERR_NUM
Error Text	ERR_TEXT
Description	ERR_DESCR

EDITS, REQUIRED FIELDS, and DEFAULTS:

ERR_NUM	Required, must contain 4 characters.
ERR_TEXT	Required, lower case letters allowed.

Business users: SWITS ADMINISTRATION

SWIU702 User Table Screen Screen

No Text

Business users: SWITS ADMINISTRATION

SWIU703 Procedure Table Screen

No Text

Business users: SWITS ADMINISTRATION

SWIU704 Security Table Screen

No Text

Business users: SWITS ADMINISTRATION

SWIU705 System Bulletin Screen

Description

Screen SWIU705 (1) is used to maintain the System Bulletins table which consists of textual information and a date.

Notes

Screen Data Element Name SWITS Database Data Element Name

Date	BUL_DATE
Text	BUL_TEXT

EDITS, REQUIRED FIELDS, and DEFAULTS:

BUL_DATE	Required.
BUL_TEXT	Required, lower case letters allowed.

ADDITIONAL PROCESSING:

Upon entering the TEXT field do an automatic F2-EDIT. Additionally, expand the TEXT field if the F2-EDIT key is depressed, no matter which field the cursor is in.

Business users: SWITS ADMINISTRATION

SWIU706 Report Table Screen

No Text

Business users: SWITS ADMINISTRATION

SWIU707 Role Table

No Text

SWIU708 User Role Table Screen

No Text

Business users: SWITS ADMINISTRATION

SWIU712 New User Setup Screen

No Text

Business users: SWITS ADMINISTRATION

SWIU713 Data Entry Screen

Transaction Logging Control

Description

This screen is used to define which tables and columns are to be included in the transaction logging process.

Notes

SCREEN DATA	SWITS DATABASE
ELEMENT NAME	DATA ELEMENT NAME
Table	AUD_TABLE
Function	AUD_FUNCTION
Column	AUD_COLUMN

EDITS, REQUIRED FIELDS, and DEFAULTS:

AUD_TABLE Must be the name of a table owned by SWIADM and not one listed in the Miscellaneous Codes Table under the field name NOTRANSLOG.

AUD_FUNCTION Must be DELETE, INSERT, or UPDATE

AUD_COLUMN If Function is DELETE or INSERT then Column must be null.
If Function is UPDATE then Column must be a column from the named table and that column must have a datatype of DATE, NUMBER, or one of the CHAR variants.

ADDITIONAL PROCESSING:

Once the control parameters are established using this screen, the SQL script schema.gentrig is run manually to create the SQLscript schema.trigger. The latter is then run to drop all existing database transaction logging triggers and create a new set.

Business users: SWITS ADMINISTRATION

SWIU714 Logged Transactions Screen

Description

This screen is used to view logged transactions.

Notes

SCREEN DATA ELEMENT NAME	SWITS DATABASE DATA ELEMENT NAME
Table	TR_TABLE
Function	TR_FUNCTION
User	TR_USERID USR_NAME
Time	TR_TIME
Key 1	TR_KEY1
Key 2	TR_KEY2
Key 3	TR_KEY3
Key 4	TR_KEY4
Key 5	TR_KEY5
Key 6	TR_KEY6
Column	TR_COLUMN
Old Value	TR_OLD
New Value	TR_NEW

EDITS, REQUIRED FIELDS, and DEFAULTS:

TR_USERID The value of this field is used to look up the name of the user who caused the transaction.

ADDITIONAL PROCESSING:

A query will retrieve a maximum of 300 records.

SWIU714 is written as an update screen but is effectively a query-only screen because no one is granted anything but SELECT access to the data.

Business users: SWITS ADMINISTRATION

SWIU715 System Change Requests Screen

Description

Screen SWIU715 (Figure x.1 and x.2) is used to record System/Software Change Requests (SCRs) and track their status. It displays all fields in the SCR table.

Notes

SCR_NUM Required.

SCR_REFSCR If entered, must exist in SCR table but cannot be the current record's SCR number.

Screen Data Element Name SWITS Database Data Element Name

SCR Number	SCR_NUM
Submitted by	SCR_SUBMIT_NAME
Date	SCR_REQ_DT
Ref SCR	SCR_REFSCR
Contact	SCR_POC_NAME
Contact Phone	SCR_POC_PHONE
Description of Change	SCR_DESCR
Justification	SCR_JUSTIF
Date Change Needed	SCR_NEED_DT
TPCN/WO#	SCR_TPCN
Estimate	SCR_EST
Estimate Approved By	SCR_ESTACPT_NAME
Current SCR Status	SCR_STATUS
Board Decision	SCR_BD_DEC
Board Comments	SCR_BD_CMTS
Requirements	SCR_IMP_SRS
Sys Design Description	SCR_IMP_SDD
Database Schema	SCR_IMP_SCHEMA
Database Content	SCR_IMP_CONTENT
Screens	SCR_IMP_SCREEN
Reports	SCR_IMP_REPORTS
WRAP DMS	SCR_IMP_DMS
Ops Safety Basis	SCR_IMP_OSB
Other	SCR_IMP_OTHER
Comments	SCR_COMMENTS
Opns Safety Basis Approved	SCR_ACTN_OSB, SCR_ACTN_OSB_DT
Assigned to Developer	SCR_ACTN_ASGN, SCR_ACTN_ASGN_DT
Task Completed/Unit Tested By	SCR_ACTN_CMPLT, SCR_ACTN_CMPLT_DT
Documentation Completed By	SCR_ACTN_DOC, SCR_ACTN_DOC_DT
Completed Task Approved By	SCR_ACTN_APPRV, SCR_ACTN_APPRV_DT
Release Number	SCR_ACTN_RLS, SCR_ACTN_RLS_DT

SCR_POC_PHONE Must be entered as (999) 999-9999 or 9-9999. In the latter case, field content will be expanded to include '(509) 37' preceding the characters entered.

SCR_BD_DEC Validate this field against the Miscellaneous Code Table using field name SCR_RECMD.

SCR_STATUS Validate this field against the Miscellaneous Code Table using field name SCR_STATUS.

ADDITIONAL PROCESSING:

The next available SCR number is provided when Alt-I is pressed while the cursor is in the SCR number field.

Business users: SWITS ADMINISTRATION

SWIU715A CCB Action Popup

No Text

SWIU715B Development Popup

No Text

SWIU715C Actions Popup

No Text

SWIU716 Data Change Requests Screen

Description

Screen SWIU716 is used to record Data Change Requests (SCRs) and track their status. It displays all fields in the DCR table.

Business users: SWITS ADMINISTRATION

3.1.11 EXTERNAL INTERFACES

EXT_1 PeopleCORE Feed

Description

PeopleCore feeds SWITS with personnel information. This is used to populate the PERSON table with potential SWITS users.

Notes

If possible, use the PeopleCore feed to identify terminated employees and make them invalid within SWITS. Darlene Hagel, 10/7/99.

EXT_2 SWEA Interface

Description

The SWEA system will be used to feed designation information into SWITS for a few months. SWITS must receive this info and apply it to the appropriate package. SWITS must provide info about packages for SWEA to work.

The WASTE and related tables are updated/inserted.

EXT_3 RADCALC Feed**Description**

The RADCALC program is the official, approved DOT radioactive content calculator.

Notes

Flow is input to SWITS. DLH, 12/14/99

EXT_4 WRAP/DMS Interface**Description**

The DMS system at WRAP interfaces to the SWITS system. Can't make changes to the SWITS schema without consulting WRAP. DMS does some reading and updating to SWITS.

EXT_5 PES Interface**Description**

The PES system is used to calculate and report statistics on the verification of radioactive waste. The PES system needs to look in to the SWITS database and retrieve data. There is no requirement that PES be able to update SWITS

3.1.12 REPORTS

A variety of reports can be created from SWITS data as described in the following sections.

Computer Software Quality Assurance Requirements, HNF-PRO-309, Section 2.6., Paragraph 7, states:

"Software application outputs shall be traceable to the software and hardware configuration status used to produce those outputs. This information shall be documented to provide traceability for each application run that is used to support a formally released output (e.g., design, design analysis, environmental report)."

To satisfy this requirement identification, date, and time of creation shall be included with reports and data retrieved from SWITS. The software configuration and hardware configuration is controlled by the *SWITS Configuration Management Plan, WHC-SD-WM-SWD-007*.

3.1.12.1 Report Selection Forms**SWIP105 Data Entry Screen**

Data Selection Pop-up Form for SWIR105

Description

Prompts for an optional TSD accept date range and / or Generator Group.

Notes

Prompts for an optional TSD accept date range and / or Generator Group. Parameters left blank default to "all".

Business users: FULL READ ONLY

SWIP106 Pop up for Generator Waste Summary Screen

Description

Screen SWIP831 () manages reports which accept a date range and Generator Group or wildcard as arguments. The screen is used by the following reports: SWIR106, SWIR602.

Notes

Screen Data Element Name	SWITS Database Data Element Name
Date Range From	DATE_FROM
Thru	DATE_TO
Generator Group	GGRP_ID

EDITS, REQUIRED FIELDS, and DEFAULTS:

DATE_FROM Defaults to 01/01/01 if blank.

DATE_TO Defaults to 12/31/99 if blank.

GGRP_ID Entries are validated against the Generator Group table. The default is the Generator Group selected by the user at log in for generator specific reports, otherwise the entry is blank.

ADDITIONAL PROCESSING:

Report SWIR106 is processed as Generator Specific. Report SWIR602 is processed as a common report. If the Generator Group entry is left blank, the report will receive a parameter of '%', indicating that all data regardless of Generator Group will be selected.

The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP107 Generator Waste Summary by Source Item Screen

No Text

Business users: FULL READ ONLY

SWIP108 Pop up for Container Age Summary by Waste Type Screen

Description

Screen SWIP831 () manages reports which accept a date range and Generator Group or wildcard as arguments. The screen is used by the following reports: SWIR106, SWIR602.

Notes

Screen Data Element Name	SWITS Database Data Element Name
Date Range From	DATE_FROM
Thru	DATE_TO
Generator Group	GGRP_ID

EDITS, REQUIRED FIELDS, and DEFAULTS:

DATE_FROM Defaults to 01/01/01 if blank.

DATE_TO Defaults to 12/31/99 if blank.

GGRP_ID Entries are validated against the Generator Group table. The default is the Generator Group selected by the user at log in for generator specific reports, otherwise the entry is blank.

ADDITIONAL PROCESSING:

Report SWIR106 is processed as Generator Specific. Report SWIR602 is processed as a common report. If the Generator Group entry is left blank, the report will receive a parameter of '%', indicating that all data regardless of Generator Group will be selected.

The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP110 Pop Up Open Container Status Screen**Description**

Screen SWIP845 (Figure 6-177) manages SWITS reports which accept a Generator Group entry, and optional Generator's payroll number. The values entered are validated against the GENERATOR table

Notes

Figure 6-0. SWIP845 Data Selection Screen.

Screen Data Element Name	SWITS Database Data Element Name
Generator Group	CON_GGRP_ID
Generator ID#	CON_GENER_ID

EDITS, REQUIRED FIELDS, and DEFAULTS:

CON_GGRP_ID Required. Entries are validated against the Generator Group table. The default is the Generator Group selected by the user at log in for generator specific reports, otherwise the entry is blank.

CON_GENER_ID Optional. Entries are validated against the GENERATOR table, where the payroll # selected must belong to the Generator Group Selected. Wildcards are not permitted.

ADDITIONAL PROCESSING:

The field name and edits used within this form are dependent upon the report selection. Reports SWIR110 and SWIR111 are processed as Generator Specific.

The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP114 Pop Up Shipping Containers Per Manifest Report Screen

Description

Screen SWIP810 () is used to enter the selection criteria for the requested report.

Notes

Screen Data Element Name	SWITS Database Data Element Name
Manifest Number	SHPMNT_MFST_NUM

EDITS, REQUIRED FIELDS, and DEFAULTS:

SHPMNT_MFST_NUM Must exist in Shipment Table.

ADDITIONAL PROCESSING:

The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP115 Data Selection Pop-up Form for SWIR115 Screen

Description

Prompts for an "outer" package ID of a labpacked container.

Notes

A list of values of "outer" containers for the labpack is provided. The input is validated against this list.

Business users: FULL READ ONLY

SWIP116 Pop Up for Generator Waste Detail by Source Item **Screen**
No Text

Business users: FULL READ ONLY

SWIP119 Pop Up Package Data Changes Due to Overpacking **Screen**
Description
Screen SWIP858 (1) accepts and validates an optional date range
and/or package id.

Notes

Screen Data Element Name	SWITS Database Data Element Name
Date From	RELOC_DT
Thru	RELOC_DT
Package ID	RELOC_PKG_ID

EDITS, REQUIRED FIELDS, and DEFAULTS:

RELOC_DT Optional. The date range defaults to Jan 01, 1940 to Dec 31, 2039 if left blank.
If the "From" date is supplied without a "Thru" date, then the "Thru" date defaults to the "From" date.

RELOC_PKG_ID Optional. If entered, the Package must match exactly (no wildcards).
This parameter defaults to NULL if left blank.

ADDITIONAL PROCESSING:

o The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP123 Pop Up for Pollution Prevention Assessment **Screen**
No Text

Business users: FULL READ ONLY

SWIP124 Pop Up shipments by disposal TPCN**Screen****Description**

Screen SWIP872 accepts parameters for generator group ID, disposal TPCN, and ship date range. Reports supported by this pop-up include SWIR124.

Notes

SCREEN DATA	SWITS DATABASE
ELEMENT NAME	DATA ELEMENT NAME

Generator Group	CON_GGRP_ID
Disposal TPCN	CON_COM1
Shipping date range from	CON_SHIP_DT
to	CON_SHIP_DT

EDITS, REQUIRED FIELDS, and DEFAULTS:

CON_GGRP_ID	Entry is required. Wildcard usage is not supported.
-------------	---

CON_COM1	Defaults to blank. All values returned if no entry is made. Wildcard usage is not supported.
----------	--

CON_SHIP_DT	If input, the report output is restricted to containers shipped between the dates given. Both fields are blank by default, evaluating to 01/01/01 through 12/31/99. The ending date defaults to the starting date if only the starting date is entered. The ending date must be later than the starting date.
-------------	---

ADDITIONAL PROCESSING

The screen, where possible, will do validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to do this validation, then the report with headings will be produced with no data on it.

Business users: FULL READ ONLY

SWIP125 Data Selection Pop-up for SWIR125**Screen****Description**

Inputs include a mandatory Generator Group, and options to specify the source facility and / or a shipping date range.

Business users: FULL READ ONLY

SWIP126 Data Selection Pop-up for SWIR126**Screen****Description**

Prompts and validates a mandatory Source Facility ID entry.

Business users: FULL READ ONLY

SWIP127 Data Selection Pop-up for SWIR127 Screen

Description

Prompts for the package status ('T' or 'F') to report PCB waste ship times.

Business users: FULL READ ONLY

SWIP202 Data Selection Pop-up Form for SWIR202

Description

Prompts for mandatory Manifest Number

SWIP203 Data selection pop-up form for swir203. Screen

Description

Screen SWIP834 () is used to enter the selection criteria for reports that accept either a Manifest Number or Labpack Package ID. The following report have been identified as using this request screen: SWIR203.

Notes

Screen Data Element Name	SWITS Database Data Element Name
--------------------------	----------------------------------

Manifest Number	SHPMNT_MFST_NUM
-----------------	-----------------

Labpack Package ID	CON_PKG_ID
--------------------	------------

EDITS, REQUIRED FIELDS, and DEFAULTS:

SHPMNT_MFST_NUM	Must exist in Shipment Table.
-----------------	-------------------------------

ADDITIONAL PROCESSING:

- The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.
- The user must select by either Manifest Number or Labpack Package ID, but not both

Business users: FULL READ ONLY.

SWIP204 Data selection pop-up form for swir204 Screen

Description

Screen SWIP865 () manages SWITS reports which require a shipment certification date range and a Purchase Order number. The screen is used by report SWIR204.

Notes

Screen Data Element Name	SWITS Database Data Element Name
Shipment Cert. Date Range From	SHPMNT_CERT_DT
Thru	SHPMNT_CERT_DT
Purchase Order #	SHPMNT_PO_NUM

Business users: FULL READ ONLY

SWIP302 Pop up for Offsite Shipment Container Location Report Screen

Description

Screen SWIP810 () is used to enter the selection criteria for the requested report.

Notes

Screen Data Element Name	SWITS Database Data Element Name
Manifest Number	SHPMNT_MFST_NUM

EDITS, REQUIRED FIELDS, and DEFAULTS:

SHPMNT_MFST_NUM	Must exist in Shipment Table.
-----------------	-------------------------------

ADDITIONAL PROCESSING:

? The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP310 Pop Up for Container Listing Report Screen

Description

Screen SWIP815 () supports optional entries for Container ID, Source Facility, Location Facility, Unit, Quadrant, and Primary Waste Type. A List of Values is available on all fields except Container ID; the values for the UNIT and QUADRANT parameters are determined by the entry in LOCATION FACILITY, or are blank by default.

Notes

Screen Data Element Name	SWITS Database Data Element Name
Package ID	CON_PKG_ID
Source Facility	CON_SRCE_FACIL_ID
Location Facility	FACIL_ID
Unit	CON_LOCN_UNIT
Quadrant	CON_LOCN_SECTION
Primary Waste Type	PWTYP_CD

EDITS, REQUIRED FIELDS, and DEFAULTS:

UNIT Defaults if left blank.

QUADRANT Defaults if left blank.

ADDITIONAL PROCESSING:

? The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP314 Pop Up for PCB Verification SWIR314 Screen

Entity Note

Validate Date Range

=====

DEFINE PROCEDURE

```

NAME = VALIDATE_DATE_RANGE
DEFINITION = <<<<
PROCEDURE VALIDATE_DATE_RANGE (DATEFROM IN DATE, DATETO IN DATE) IS
BEGIN
  IF DATEFROM > DATETO THEN
    GET_ERR_TEXT('E078');
    MESSAGE(:GLOBAL.ERR_TEXT);
    GO_FIELD(:SYSTEM.CURSOR_BLOCK||'.DATE_FROM');
    raise FORM_TRIGGER_FAILURE;
  END IF;
END;
```

Generator Group Id Pop up

```
select ggrp_id, ggrp_name into :swip891.ggrp_id from gengroup order by 1
```

Notes

Screen SWIP314 (figure xxxx) manages reports which accept container shipment date range and generator group Id as input parameters.

EDITS, REQUIRED FIELDS, and DEFAULTS:

Shipment Date From and To Optional - To date defaults to from date when only from date is entered. Edits that date entered is valid date and to date must be >= from date.

Generator Group

Optional - Must match generator group Id from GENGROUP table.

ADDITIONAL PROCESSING:

? From and to dates default to 01/01/1940 and 12/31/2039. Generator group defaults to ??? when it is not entered.

? The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP315 Pop Up for Generator Verification by Gen Group SWIR315 Screen
Entity Note
Validate Date Range

DEFINE PROCEDURE

```
NAME = VALIDATE_DATE_RANGE
DEFINITION = <<<<
PROCEDURE VALIDATE_DATE_RANGE (DATEFROM IN DATE, DATETO IN DATE) IS
BEGIN
  IF DATEFROM > DATETO THEN
    GET_ERR_TEXT('E078');
    MESSAGE(:GLOBAL.ERR_TEXT);
    GO_FIELD(:SYSTEM.CURSOR_BLOCK||'.DATE_FROM');
    raise FORM_TRIGGER_FAILURE;
  END IF;
END;
```

Pop Up for Group ID

```
select ggrp_id, ggrp_name into :swip877.ggrp_id from gengroup order by 1
```

Pop Up for Primary Waste Type

```
select pwtyp_cd, pwtyp_descr into :swip877.pwtyp_cd from priwastype order by 1
```

Notes

Screen SWIP315 () is used to enter the selection criteria for the requested report.

EDITS, REQUIRED FIELDS, and DEFAULTS:

Generator Group Defaults to '%' if blank.

Primary Waste Type Accepts a valid primary type code or a wildcard '%'

ADDITIONAL PROCESSING:

? The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP317 Pop Up for Waste Stream Audit Report SWIR317 Screen

Entity Note

Validate Date Range

=====

DEFINE PROCEDURE

NAME = VALIDATE_DATE_RANGE

DEFINITION = <<<

PROCEDURE VALIDATE_DATE_RANGE (DATEFROM IN DATE, DATETO IN DATE) IS
BEGIN

IF DATEFROM > DATETO THEN

GET_ERR_TEXT('E078');

MESSAGE(:GLOBAL.ERR_TEXT);

GO_FIELD(:SYSTEM.CURSOR_BLOCK||'.DATE_FROM');

raise FORM_TRIGGER_FAILURE;

END IF;

END;

Generator Group Id Pop up

=====

select ggrp_id, ggrp_name into :swip891.ggrp_id from gengroup order by 1

Notes

Screen SWIP317 () manages reports which accept a date range and Generator Group or wildcard as arguments.

EDITS, REQUIRED FIELDS, and DEFAULTS:

DATE_FROM Defaults to 01/01/1940 if blank.

DATE_TO Defaults to 12/31/2039 if blank.

GGRP_ID Entries are validated against the Generator Group table . The default is the Generator Group selected by the user at log in for generator specific reports, otherwise the entry is blank.

ADDITIONAL PROCESSING:

? If the Generator Group entry is left blank, the report will receive a parameter of '%', indicating that all data regardless of Generator Group can be selected.

? The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP322 Pop Up DOE Verification SWIR322 Screen

Entity Note

Validate Date Range

DEFINE PROCEDURE

NAME = VALIDATE_DATE_RANGE

DEFINITION = <<<<

PROCEDURE VALIDATE_DATE_RANGE (DATEFROM IN DATE, DATETO IN DATE) IS
BEGIN

IF DATEFROM > DATETO THEN

GET_ERR_TEXT('E078');

MESSAGE(:GLOBAL.ERR_TEXT);

GO_FIELD(:SYSTEM.CURSOR_BLOCK||'.DATE_FROM');

raise FORM_TRIGGER_FAILURE;

END IF;

END;

Code to build an input parameter for the report.

=====

if :swip823.pwtyp_cd = 'H' then

:global.rpt_where_clause :=

'and con_pwtyp_cd in \('H', 'HP')';

else

:global.rpt_where_clause :=

'and nv\('con_pwtyp_cd, ' ')\ in \('M', 'MP', 'CM') '||

'and con_locn_facil_id <> '616';

```
select cmpny_id, substr(cmpny_title,1,30) into :swip823.cmpny_id
from company where cmpny_type = 'GEN' order by 1
```

```
select count(*) into cnt from facility
where facil_id like :swip823.sfamil_id||'%';
```

Notes

Limits the Primary Waste type code to 'H' or 'M'.

Screen SWIP322 () is used to enter the selection criteria for the requested report.

EDITS, REQUIRED FIELDS, and DEFAULTS:

Report Starting Date Required. .

Report Ending Date Required.

Primary Waste Type

(H,M) Must be either H or M. If 'H' packages must have a CON_PWTYP_CD of 'H' or 'HP'. If set to 'M' packages with CON_PWTYP_CD 'M', 'MP', and 'CM' are selected.

ADDITIONAL PROCESSING:

? The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP328 EP125 Inventory Report Generation Screen**Description**

Entry point for producing the annual EP125 RAD Inventories Report. Prompts include a reporting year (4 digits), Report revision number and option to halt the process for data verification. All entries are mandatory.

Business users: FULL READ ONLY

SWIP333 Pop Up for PCB annual document log (Radioactive) Screen**Description**

Screen SWIP819 (Figure 6-152) is used to enter the selection criteria for the requested report.

Notes

Figure 6-0. SWIP819 Data Selection Screen.

Screen Data Element Name SWITS Database Data Element Name

Year Year of CON_TSD_ACCEPT_DT or SHPMNT_SHIP_DT, EDITS, REQUIRED
FIELDS, and DEFAULTS:

Year Required , no default, entered as 'YYYY'.

ADDITIONAL PROCESSING:

o The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP334 Pop Up for PCB annual document Log (Non-Rad) Screen

Description

Screen SWIP819 (0) is used to enter the selection criteria for the requested report.

Notes

The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP335 Pop Up for Annual PCB Trench 94 ReportScreen

Description

Screen SWIP819 (0) is used to enter the selection criteria for the requested report.

Notes

The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP340 Pop Up Solid Waste Management Receipt SWIR340 Screen

Entity Note

Validate Date Range

DEFINE PROCEDURE

NAME = VALIDATE_DATE_RANGE

```

DEFINITION = <<<
PROCEDURE VALIDATE_DATE_RANGE (DATEFROM IN DATE, DATETO IN DATE) IS
BEGIN
  IF DATEFROM > DATETO THEN
    GET_ERR_TEXT('E078');
    MESSAGE(:GLOBAL.ERR_TEXT);
    GO_FIELD(:SYSTEM.CURSOR_BLOCK||'.DATE_FROM');
    raise FORM_TRIGGER_FAILURE;
  END IF;
END;

```

Pop Up for Facility ID

```

=====
select distinct tfac_class into :swip866.facil
  from tsdfacil where
    tfac_class is not null
  order by 1

```

Notes

Screen SWIP340 accepts parameters for a range of dates and on optional TSD facility class.

EDITS, REQUIRED FIELDS, and DEFAULTS:

CON_TSD_ACCEPT_DT Entry is required. Records are selected with dates that fall within the range

TFAC_CLASS Defaults to blank. If left blank, the report includes all facility classes.

ADDITIONAL PROCESSING

The screen, where possible, will do validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to do this validation, then the report with headings will be produced with no data on it.

Business users: FULL READ ONLY

SWIP341 Pop Up for SEN 37-92 Waste Minimization Report SWIR341 Screen
 Entity Note
 Validate Date Range

```

DEFINE PROCEDURE
NAME = VALIDATE_DATE_RANGE
DEFINITION = <<<<
PROCEDURE VALIDATE_DATE_RANGE (DATEFROM IN DATE, DATETO IN DATE) IS
BEGIN
  IF DATEFROM > DATETO THEN
    GET_ERR_TEXT('E078');
    MESSAGE(:GLOBAL.ERR_TEXT);
    GO_FIELD(:SYSTEM.CURSOR_BLOCK||'.DATE_FROM');
    raise FORM_TRIGGER_FAILURE;
  END IF;
END;

```

Pop Up for company

```

=====
select cmpny_id, cmpny_title into :swip871.cmpny_id
  from company
  where cmpny_type = 'GEN'
    and cmpny_location = 'ON'
  order by 2

```

Pop up for source Facility

```

=====
select facil_id, facil_name into :swip871.sfamil_id from facility order by 1

```

Notes

Screen SWIP871 accepts parameters for TSD accept date range, company (contractor), source facility and a sort order of ?1' or ?2'.

EDITS, REQUIRED FIELDS, and DEFAULTS:

TSD Accept Date From and To Optional, when entered must be valid dates and the To date greater then or equal to the From date. Date range defaults to 01/01/01 - 12/31/99 when left blank. If only the From date is entered then the To date is set equal to the From date.

Company	Optional, when entered must be a valid company ID.
---------	--

Source Facility	Optional, when entered must be valid facility ID. Additionally, it must be a valid facility ID for the company ID when a company is selected.
-----------------	---

Sort Order	Required, valid values are ?1' and ?2'.
------------	---

ADDITIONAL PROCESSING

The screen, where possible, will do validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to do this validation, then the report with headings will be produced with no data on it.

Business users: FULL READ ONLY

SWIP342 Pop Up for Annual Dangerous Waste Report Screen**Description**

Screen SWIP824 accepts parameters for a range of dates and a starting page number for the report.

Notes

SCREEN DATA SWITS DATABASE

ELEMENT NAME DATA ELEMENT NAME

Shipment Date Range From con_tsd_accept_dt or shpmnt_ship_dt

Thru con_tsd_accept_dt or shpmnt_ship_dt

Starting page# to use n/a

EDITS, REQUIRED FIELDS, and DEFAULTS:

CON_TSD_ACCEPT_DT or
SHPMNT_SHIP_DT

Entry is required. Records are selected
with dates that fall within the range

Starting page#

Entry is required. Must be within the range of 1 thru 999

ADDITIONAL PROCESSING

The screen, where possible, will do validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to do this validation, then the report with headings will be produced with no data on it.

Business users: FULL READ ONLY

SWIP354 Pop Up for PCB Compliance Report Screen**Description**

Screen SWIP833 (Figure 6-165) manages reports which accept From and To dates as input parameters.

Former problem:

This program uses the following fields that are not in the new designer:

REQ_ISSUE_DT,
REQ_ACCEPT_DT,
REQ_START_DT

They are in the 'REQUEST' table currently in SWITS. 10/28/99 - the Requests are going away. The containers will be selected using other criteria.

Notes

Screen Data Element Name	SWITS Database Data Element Name
--------------------------	----------------------------------

Date Range From, Thru	HDET_PCB_REMOVED_DT (SWIR355)
	CON_TSD_ACCEPT_DT (SWIR355)
	REQ_ISSUE_DT, REQ_ACCEPT_DT, REQ_START_DT (SWIR608)

EDITS, REQUIRED FIELDS, and DEFAULTS:

HDET_PCB_REMOVED_DT,	
CON_TSD_ACCEPT_DT	Optional - To Date defaults to From Date if not entered.
REQ_ISSUE_DT,	
REQ_ACCEPT_DT,	
REQ_START_DT	From Date is required. The To Date defaults to the From Date if not entered.

ADDITIONAL PROCESSING:

- o The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

Business users: FULL READ ONLY

SWIP400 Data Selection Pop-up Form for SWIR400 Screen

Description

Accepts and validates a mandatory report sort order value of 1 or 2. The validation is not based on a table or field.

Business users: FULL READ ONLY

SWIP405 Data Selection Pop-up For SWIR405 Screen

No Text

Business users: FULL READ ONLY

SWIP410 Data Selection Pop-up Form for SWIR410 Screen**Description**

Accepts a four digit fiscal year for running report SWIR410.

From this popup the user selects: Fiscal Year

Edits and Requirements:

Fiscal Year Optional, no default value

Notes

Previously SWIP819

Business users: CHARGE CODE MANAGEMENT, FULL READ ONLY

SWIP416 Data Selection Pop-up Form for SWIR416 Screen**Description**

Asks the user to "Enter Generator Group", verifies that it is a valid group, then passes the value to a report process.

Notes

Asks the user to "Enter Generator Group", verifies that it is a valid group, then passes the value to the SWIR416 report process.

Business users: FULL READ ONLY

SWIP426 Data Selection Pop-up for SWIR426 Screen**Description**

Previously SWIP883

Manages reports which accept a waste stream type and order by clause as parameters. Runs report SWIR426.

From this popup the user selects: Type of Waste Stream - STRM_CD
Generated On/Offsite - STRM_SRCE_LOCN

Notes

Type of Waste Stream Must be "A," "M," or "H" for All, Mixed or Hazardous, respectively. No Default is supplied and the field may not be blank or null.

ADDITIONAL PROCESSING:

The screen, where possible, will perform validation of the selection criteria to ensure that a report will contain data. In cases where it is not feasible to perform this validation, then the report will be produced with headings but with no data.

An ORDER BY clause is constructed in the KEY-COMMIT trigger of the block containing this data selection screen and is passed as parameter &order_by. A string suitable for display in the report header is defined and passed as &strm_sel. A third parameter, &strm, is defined for use in the WHERE clause to limit streams included in the report.

Business users: FULL READ ONLY

SWIP525 Data Selection Pop-up Form for SWIR525 Screen

Description

Manages reports which accept a purchase order number, purchase order release number, purchase order item number and CMP received from and to dates as parameters. This screen is used by the following report: SWIR525.

Notes

EDITS, REQUIRED FIELDS, and DEFAULTS:

Purchase Order - Optional, defaults to blank. All values returned if no entry is made. Wildcard usage is not supported.

Purchase Order Release Number - Optional, defaults to blank. Not allowed if Purchase Order is blank. All values returned if no entry is made. Wildcard usage is not supported.

Purchase Order Item No Optional, defaults to blank. Not allowed if Purchase Order Release Number is blank. All values returned if no entry is made. Wildcard usage is not supported.

Received into CMP date range Optional, defaults to blanks. All dates (including null) returned if no entry is made. Dates must be valid dates and to date can not be before the from date. The to date defaults to the from date if the from date is entered. The to date is also set to blanks if the from date is left blank.

Selection must be made by Purchase Order and/or Received into CMP date range (can not leave both blank).

Business users: CONTAINER MANAGEMENT, FULL READ ONLY

SWIP550 Data Selection Pop-up Form for SWIR550 Screen

Description

Accepts a CIN (Container Inventory Number) package ID range to produce barcode labels. Labels falling within the numeric range must exist in the CINVENTORY table to print.

Business users: CONTAINER MANAGEMENT, FULL READ ONLY

SWIP551 Data Selection Pop-up Form for SWIR551 Screen**Description**

Optional parameters include a Facility ID, Quadrant, Module, Tier Level or Tier Position, TSD Accept Date, Portfolio #, or a specific PIN or CIN #. Entries left blank will default to "all" records.

Business users: FULL READ ONLY

SWIP552 Data Selection Pop-up Form for SWIR552 Screen**Description**

Accepts either a valid Facility ID or TSD Location parameters, such as Unit, Module, Tier Level and Tier Position.

Business users: FULL READ ONLY

SWIP700 Data Selection Pop-up Form for SWIR700 Screen**Description**

Parameters include a report execution date range, report #, and user ID. All inputs are optional.

Business users: FULL READ ONLY

SWIP701 Data Selection Pop-up for Form SWIR701**Screen**

No Text

Business users: FULL READ ONLY

SWIP705 Data Selection Pop-up Form for SWIR705**Screen****Description**

Prompts for a mandatory system bulletin date. The date is validated against the records in the SYSBULL table.

Business users: FULL READ ONLY

SWIP711 Data Selection Pop-up for Form SWIR711**Screen****Description**

Prompts for a DCR number or DCR number range to print. The input is validated against the DCR table.

Business users: FULL READ ONLY

3.1.12.2 Report Descriptions and Logic**SWIR105 Average Ship Time Screen****Description**

Generator performance report, displaying the average ship time and count of containers shipped, by waste type, for the specified Generator Group and / or TSD accept date range. The ship time for a container is the CON_SHIP_DATE - CON_ACCUM_DATE.

Business users: FULL READ ONLY

SWIR106 Generator Waste Summary Screen

Description

The Generator Waste Summary (SWIR106) report provides waste generation and shipment information for a selected date range and generator group. This information is intended to support internal management and provide information for the DOE-HQ Performance Indicator Report (PIR). Information is subtotaled by Primary Waste Type and Secondary Waste Group. Weights are reported in both kilograms and pounds. Volumes are reported in both cubic meters and cubic feet.

Notes

Note: Check the calculations used on this query.

Report Data Element Name	SWITS Database Data Element Name
Waste Type	PWTYP_DESCR for CON_PWTYP_CD and decode of RDET_SWTYP_GROUP where LLW = LOW LEVEL, TRU=TRANSURANIC and HLW = HIGH LEVEL
Weight (Kg and Lb)	CON_WASTE_WGT
Container Volume (Cubic Meters and Cubic Feet)	CON_CNTR_VOL

Additional Processing: Categorize into waste types by CON_PWTYP_CD and RDET_SWTYP_GROUP

Selection: Report Date Range and Generator Group (CON_GGRP_ID).
The generator group will default to the generator group of the user.

Data Selects: CON_PKG_STATUS not in ('I','K','P','R','U','Y')

Sort Sequence: None

Schedule: None

Frequency: As requested (monthly)

Volume: TBD

Totals: Generated Totals - Generated totals include records with accumulation dates (CON_ACCUM_DT) during the selected date range.

Pending Shipment Totals - Pending shipment totals include records with an accumulation date <= the end date in the specified range and either a null ship date, or a ship date > the end date. (in DB terms: CON_ACCUM_DT IS BETWEEN From_Date, To_Date AND (CON_SHIP_DT IS NULL OR CON_SHIP_DT > To_Date)

Shipped Totals - Shipped totals include values with a shipment date (CON_SHIP_DT) during the selected date range.

Weights are reported in both kilograms and pounds. Volumes are reported in both cubic meters and cubic feet.

Report the totals for each waste type in the body of the category (e.g., Generated).

Report the total for all waste types in the Total of each category.

Page Break: by Category (Generated, Pending Shipment, Shipped)

Requestor: Generators

Report Source: New

Special Form/Font: hplsn

Programmer Notes: Since compaction happens after generation and shipping, outer compaction containers (CON_PKG_STATUS = K) are excluded and inner compaction containers are included (CON_PKG_STATUS = C). This handling also allows for t

Notes

Totals to be computed for all generators by using a % for CON_GGRP_ID.

Business users: FULL READ ONLY

SWIR107 Generator Waste Summary by Source Item Screen

Notes

Change the sort criteria to 'none' and consistent with the 106 report.

Business users: FULL READ ONLY

SWIR108 Container Age Summary by Waste Type Screen

Description

This report provides the shipping status (age) and container count for all containers of each primary waste type in a generator group under generator control. Subtotals are given for the number of containers in each primary waste type and the total container count. A sample report layout is shown in .

Notes

Report Data Element Name	SWITS Database Data Element Name
Waste Type	PWTYP_DESCR matching CON_PWTYP_CD
Container Status	CON_AGE (Calculated)
Count	by CON_PWTYP_CD

Additional Processing: For CON_PWTYP_CDs with corresponding non-NULL PWTYP_SHIP_TIME calculate shipping status using SYSDATE and CON_ACCUM_DATE.

For waste types with no ship time (PWTYP_SHIP_TIME is null) use shipping status "NO LIMIT".

Shipping Status is calculated as the difference between the container accumulation date (CON_ACCUM_DT) and the system date. The results will be tallied in the following categories for non-PCB hazardous waste (i.e., PWTyp_SHIP_TIME = 89):

- 0-30 days
- 31-60 days
- 61-90 days
- > 90 days

Shipping Status will be the computed age and will be tallied in the following categories for PCB waste (i.e., PWTyp_SHIP_TIME = 29):

- 0-30 days
- > 30 days

Selection: All container records for requesting generator group using CON_GGRP_ID under generator control.

Data Selects: CON_PKG_STATUS IN ('G','E')

Sort Sequence: Waste Types need to be grouped so they show up in 3 categories:

1. 30 day clock (PWTyp_SHIP_TIME = 29);
2. 90 day clock (PWTyp_SHIP_TIME = 89); and
3. no limit (PWTyp_SHIP_TIME IS NULL).

No specific order within the groups is necessary.

Schedule: None

Frequency: As requested (weekly)

Volume: TBD

Totals: By Waste Type for each shipping status and age category above.

The 3 categories are

- PWTyp_SHIP_TIME is NULL,
- = 29, and
- = 89.

Page Break: As required

Requestor: Generators (replacement for GWTR150)

Special Form/Font: hpstd

Business users: FULL READ ONLY

SWIR110 Open Container Status Screen

Description

The Open Container Status - Hazardous report (SWIR110) provides detailed information about each waste container under control of the requesting generator group.

Note:

The applicable regulations should be selected for this process (TASCA, CERCLA, Dangerous, RAD)
Non Reg will be selected if none of the above are chosen.

Uses Genwaste VIEW.

Report Data Element Name	SWITS Database Data Element Name
Package ID	CON_PKG_ID
Facility ID	CON_LOCN_FACIL_ID
Waste Type	CON_PWTYP_CD
Accum Date	CON_ACCUM_DT
Due Date	CON_DEADLINE_DT
Days Rem	CON_DAYS_REM (view ALLGENWASTE)
Days Old	CON_AGE (view ALLGENWASTE)
Sam Flag	CON_SAMPLE_FLAG
Req Num.	CON_REQ_NUM
Response Issue Dt	REQ_ISSUE_DT via CON_REQ_NUM
Container Type / Size	CON_CNTYP_CD ' CON_SIZE_DESCR
Container Contents	CON_GENER_WASTE_DESCR (wrap if needed)
Comments	CON_GENER_COMMENT (wrap if needed)
Container Received Date	CON_CNTR_RECV_DT

Sort Sequence: Waste Type, Days remaining, and Package ID

Selection: CON_GGRP_ID, default to Generator Group of User.

CON_GENER_ID, optional, generator must be a member of the generator group selected.

Data Selects: CON_PKG_STATUS IN ('G','E')
CON_PWTYP_CD WHERE PWTYP_HAZ = 'Y'

Schedule: None

Frequency: As requested (weekly)

Volume: TBD

Totals: Total Containers

Page Break: As required

Requestor: Generators (replaces old GWTR130)

Special Form/Font: Not applicable

Currently uses the req_issue_dt and con_req_num from request. Request is an archive table.

Business users: FULL READ ONLY

SWIR114 Shipping Containers per Manifest Report Screen

Description

The SWIR114 report lists the PIN numbers of external shipping containers for a shipment, i.e., the package IDs shipped on a particular manifest.

Notes

Report Data Element Name	SWITS Database Data Element Name
--------------------------	----------------------------------

Certification Date	SHPMNT_CERT_DT
Manifest Type	SHPMNT_MFST_TYPE_CD
Item Num	SHPHST_ITEM_NUM
Shipping Container Package ID	SHPHST_PKG_ID
Date Shipped	SHPMNT_SHIP_DT
Container Size Description	CON_SIZE_DESCR
Container Volume	CON_CNTR_VOL
Container Comments	CON_COM1

Selection: Manifest number (used for SHPMNT_MFST_NUM and SHPHST_MFST_NUM)
 Sort Sequence: SHPHST_ITEM_NUM
 Schedule: n/a
 Frequency: As requested
 Volume: TBD
 Totals: Count of SHPHST_PKG_ID
 Page Break: none
 Requestor: Larry Cole, Transportation Logistics
 Special Form/Font: hpstd

Business users: FULL READ ONLY

SWIR115 LabPack Detail Report Screen

Description

Lists the inner container ID's and waste contents labpacked into the input "outer" package ID.

Business users: FULL READ ONLY

SWIR116 Generator Waste Detail by Source Item Screen

No Text

Business users: FULL READ ONLY

SWIR119 Package Data Changes Due to Overpacking Screen

Description

Report SWIR119 produces a list of the data elements that are changed for a specific package as a result of overpacking. This report will be filed/stapled to the burial record, or for archived records, will be placed into the change log book. Report selection criteria are by Overpack Date and/or From Package ID.

Notes

Report Data Element Name	SWITS Data Element Name
--------------------------	-------------------------

To Package ID	CON_PKG_ID
---------------	------------

Container Type Code	CON_CNTYP_CD
Container Size Description	CON_SIZE_DESCR
Container Volume (M3)	CON_CNTR_VOL
Container Waste Wt.(kg)	CON_WASTE_WGT
Container Empty Tare Wt.(kg)	CON_TARE_WGT
Container Total Wt.(kg)	CON_GROSS_WGT
Container DOT Spec	CON_DOT_SPEC
Dose Rate	RDET_BG_DOSE_RATE

Repackaging History:

Current Container	CONR_TO_PKG_ID
Previous Container(s)	CONR_FROM_PKG_ID
Date Repackaged	CONR_DT
Action Taken	CONR_REL_CD

Packaging Records:

Content Description	PHYS_COMP_DESCR
Volume %	PHYS_COMP_VOL_PCT
Weight (kg)	PHYS_COMP_WGT

Manifest/Shipping Information:

Manifest #	SHPHST_MFST_NUM
Type	SHPMNT_MFST_TYPE_CD
Ship Date	SHPMNT_SHIP_DT

User Selection: CONR_DT range and/or CONR_FROM_PKG_ID

Data Selects: Radioactive waste (join with RADDETAIL table).

An overpack repackaging operation (CONR_REL_CD = 'O') exists for the Date Range or From Package ID specified by the user. CON_PKG_STATUS of CONR_TO_PKG_ID = 'K', 'T', or 'X'.

Sort Sequence: CON_PKG_ID

Schedule: As requested

Frequency: As needed

Volume: 1 page per CON_PKG_ID

Totals: total PHYS_COMP_WGT

Page Break: as required

Requestor/Org. Name: WMP, SWO

Special Form/Font, etc: hpstd

Report Distribution: 1 copy - Internal Use Only

FROM (Inner) Package ID: XXXXXXXXXXXXXXXX

Overpack Date: MM/DD/YY

TO Package ID: XXXXXXXXXXXXXXXX

Container Type Code: XX
Container Size Description: XXXXXXXXXXXXXXXX
Container Volume (M3): 999999999999
Container Waste Wt. (kg): 999999999999
Container Empty Tare Wt. (kg): 999999999999
Container Total Wt. (kg): 999999999999
Container DOT Spec: XXX
Dose Rate: 9.99999E+99
Repackaging History:

Current Container Previous Container(s) Repackaged Action Taken

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX MM/DD/YY
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX MM/DD/YY
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Packaging Records:

Content Description Volume % Weight (kg)

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX 99999999 999999999999
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX 99999999 999999999999
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX 99999999 999999999999

Manifest Information:

Manifest # Type Ship Date

XXXXXXXXXXXX XXX MM/DD/YY

Business users: FULL READ ONLY

SWIR123 Pollution Prevention Assessment Screen**Description**

Displays information about physical characteristics and hazardous components of waste accumulated at facilities during a specified time period.

Notes

Report Data Name SWITS Database

ELEMENT NAME	DATA ELEMENT NAME
--------------	-------------------

Generator Group	CON_GGRP_ID
Source Facility	CON_SRCE_FACIL_ID
Accumulation Date	CON_ACCUM_DT
Hazardous Products	HAZ_COMP_TEXT
Physical Products	PHYS_COMP_DESCR
Package ID	CON_PKG_ID
Stat	CON_PKG_STATUS
PWT	CON_PWTYP_CD
GRP	RDET_SWTYP_GROUP
Cd	CON_CNTYP_CD
Activity	CON_COM1
Recyd	CON_YN1
Cmpct	CON_YN2
Package ID	CON_SEC_PKG_ID
Haz Components	HAZ_COMP_TEXT
Weight	HAZ_COMP_WGT
EPCRA?	HAZ_EPCRA_FLAG
Phys	PHYS_COMP_DESCR
Weight	PHYS_COMP_WGT
Vol %	PHYS_COMP_VOL_PCT
From Pkg ID	ONR_FROM_PKG_ID

Sort Sequence: CON_SRCE_FACIL_ID, CON_PWTYP_CD, RDET_SWTYP_CD, C
ON_COM1, CON_PKG_ID

Data Selects: User-specified CON_GGRP_ID, optional user-specified CON_SRCE_FACIL_ID, user-specified from and to CON_ACCUM_DT, user-specified HAZ_COMP_TEXT with wildcards, user-specified PHYS_COMP_DESCR with wildcards, CON_PKG_STATUS not in ('C', 'I', 'M', 'R', 'U', 'V')

Selection: n/a

Schedule: n/a

Frequency: as Required

Volume: 1 - 100 pages

Totals: Total weights by physical and hazardous components

Page Break: n/a

Requestor: Darlene Hagel

Org Name: WHC

Special Form/Font, etc: hplsc

Report Distribution: 1 copy - Internal Use Only

Business users: FULL READ ONLY

SWIR124 Waste Shipments by Disposal Charge Code Screen

Description

Displays information about waste shipments within a specified time period.

Business users: FULL READ ONLY

SWIR125 Waste Shipments by Source Facility Screen

Description

Displays waste containers shipped by the input Generator group for the specified shipping date range (if provided), grouped by Source Facility. Fields shown include the PIN or CIN #, primary waste type, RSR or Manifest number, waste accumulation date, shipping date, the "age" (difference between the accumulation and shipping dates), TSD accept date, the shipper's name, contents description, disposal charge code, and waste volume.

Business users: FULL READ ONLY

SWIR126 HS -0034/4734B Inventory Report Screen

Description

A PCB and Non-Regulated Waste Inventory Report for the input Facility. Fields include the package status, primary waste type code, source facility, PIN/CIN #, container status code, "out of service" date (for PCB's), shipping deadline date, container type code, container size, PCB weight, contents description, and Dangerous Waste (DW) numbers.

Business users: FULL READ ONLY

SWIR127 Age Summary for 4734B Facility Screen

Description

A storage summary for PCB and Non-Regulated wastes stored at the 4734B Facility

Business users: FULL READ ONLY

SWIR202 Hazardous Waste Disposal Cost Report Screen

Description

This report provides a listing of disposal and contingent disposal costs for manifest line items. The user enters the offsite manifest number for which the report is to be run. Report data is then selected based upon the manifest number.

Entity Note

```

select distinct shpitm_mfst_num, shpitm_item_num,
       shpitm_contg_liab, shpitm_disp_cost
from offsitefst
where shpmnt_mfst_num = :manifest
order by 1, 2

```

```

select con_req_num req, count(*) item_cntr_count, con_gener_id,
       con_srce_chrg_cd, con_srce_facil_id,
       shpitm_mfst_num, shpitm_item_num
from waste, offsitefst
where con_pkg_id = shphst_pkg_id
group by con_req_num, con_gener_id, con_srce_facil_id,
       con_srce_chrg_cd, shpitm_mfst_num, shpitm_item_num
order by 1, 3, 4, 5

```

Notes

Report Data Element Name	SWITS Database Data Element Name
For Offsite Manifest No.	SHPHST_MFST_NUM
Purchase Order	SHPMNT_PO_NUM
Invoice Number	SHPMNT_INVOICE
Item No.	SHPHST_ITEM_NUM
Request Number	CON_REQ_NUM
Container Count	Count(*) of SHIPHIST records per Manifest, Line Item, Request Number, Generator, Facility, and Charge Code
Generator Name	PERS_NAME (where PERS_ID = CON_GENER_ID)
Charge Code	CON_SRCE_CHRG_CD
Facility ID.	CON_SRCE_FACIL_ID
Contingent Liability	SHPITM_CONTG_LIAB
Disposal Cost	SHPITM_DISP_COST

User Selection: single SHPHST_MFST_NUM

Data Selects: Offsite Shipments (via OFFSITEMFST view)

Sort Sequence: SHPHST_ITEM_NUM, CON_REQ_NUM, CON_GENER_ID,
CON_SRCE_CHRG_CD, CON_SRCE_FACIL_ID

Schedule: n/a

Frequency: as needed

Volume: 5-10 pgs

Totals: SHPITM_CONTG_LIAB and SHPITM_DISP_COST by Offsite SHPHST_MFST_NUM

Page Break: none

Requestor/Org Name: DL Hagel, WMP

Special Form/Font: hpstd

Report Distribution: Cost Accounting

Business users: FULL READ ONLY

SWIR203 Labpack Description Report Screen**Description**

The Labpack Description Report (SWIR203) provides a detailed description of labpack containers by Manifest or individual Labpack Package ID. This report will accompany a waste shipment to the Treatment, Storage and Disposal (TSD) facility. For hazardous waste, this would be the offsite hazardous waste disposal contractor. The user selects by Manifest or Labpack Package ID.

Notes

SWIR203 needs to be modified for RAD use - note from Waste Management Business Process facilitated session on 3/24/99 - Dwight

Report Data Element Name	SWITS Database Data Element Name
<variable report title> 'for Manifest Number' or 'for Labpack Package ID'	SHPHST_MFST_NUM or CONR_TO_PKG_ID
Manifest Number	SHPHST_MFST_NUM
Manifest Item	SHPHST_ITEM_NUM
Primary Package ID No.	CONR_TO_PKG_ID
Inner Package ID No.	CONR_FROM_PKG_ID
Container	
Type	CON_CNTYP_CD
Size Description	CON_SIZE_DESCR
Waste Description	CON_GENER_WASTE_DESCR
Waste Component	HAZ_COMP_TEXT
Wt %	HAZ_COMP_WGT_PCT
PPM	HAZ_COMP_PPM
Phys Code	CON_PHYS_STATE_CD
Waste Wgt (kgs)	CON_WASTE_WGT
Desig Code	HDET_DESIG_CD
Dangerous Waste Numbers	HDET_DW_NUM

User Selection: SHPHST_MFST_NUM or CONR_TO_PKG_ID (Labpack Package ID)

Data Selects: by Manifest Number -

 All containers on Manifest (either on-site or off-site manifests) that are
CONR_TO_PKG_ID's in CONREL table and have CON_LABPACK_FLAG = 'Y'

 by Labpack Package ID (see programmer notes)-

Package ID is a CONR_TO_PKG_ID in CONREL table and has
CON_LABPACK_FLAG = 'Y'

Sort Sequence: by Manifest Number -

SHPHST_ITEM_NUM, CONR_TO_PKG_ID

by Labpack Package ID -

CONR_TO_PKG_ID

Schedule: n/a

Frequency: as needed

Volume: 5-10 pages

Page Break: SHPHST_ITEM_NUM

Requestor/Org Name: DL Hagel, WMP

Special Form/Font: hplsc

Report Distribution: WMP technician, Transportation Logistics, offsite disposal contractor,
offsite shipping list attachment

Programmer Notes: When generating this report by individual Labpack Package ID there are different relationships that may or may not exist between Labpack and Manifest(s): the Labpack may be on one manifest (either on or off-site), it may be on both on and off-site manifests, or it may not be on either. In the case where the Labpack is on both on and off-site m

Notes

manifests the manifest information that will appear on the R203 report will be for the off-site manifest. If the Labpack is not on either type of manifest, a report will be produced without manifest information.

Business users: FULL READ ONLY

SWIR204 Offsite Shipments Monthly ReportScreen

No Text

Business users: FULL READ ONLY

SWIR206 Unreturned Manifests Report Screen

Description

This report lists certified offsite and direct offsite manifests that have not been returned. The manifests are grouped and reported by length of time from certification; Certification < 30 Days Old, Certification 30 - 40 Days Old, and Certification > 40 Days Old.

Entity Note

```
select 'Certification < 30 Days Old' cert_age_group, 3 srt_field,
      shpmnt_cert_dt, shpmnt_mfst_num, shpmnt_ship_dt
from shipment
where shpmnt_mfst_ret_dt is NULL
and shpmnt_mfst_type_cd in ('OFF', 'DIR')
and shpmnt_cert_dt >= to_date('01/01/1998', 'mm/dd/yyyy')
```


and trunc(sysdate) - shpmnt_cert_dt < 30

UNION

```
select 'Certification 30 - 40 Days Old', 2, shpmnt_cert_dt, shpmnt_mfst_num, shpmnt_ship_dt
from shipment
where shpmnt_mfst_ret_dt is NULL
  and shpmnt_mfst_type_cd in ('OFF', 'DIR')
  and shpmnt_cert_dt >= to_date('01/01/1998', 'mm/dd/yyyy')
  and trunc(sysdate) - shpmnt_cert_dt between 30 and 40
```

UNION

```
select 'Certification > 40 Days Old', 1, shpmnt_cert_dt, shpmnt_mfst_num, shpmnt_ship_dt
from shipment
where shpmnt_mfst_ret_dt is NULL
  and shpmnt_mfst_type_cd in ('OFF', 'DIR')
  and shpmnt_cert_dt >= to_date('01/01/1998', 'mm/dd/yyyy')
  and trunc(sysdate) - shpmnt_cert_dt > 40
order by 2, 3, 4
```

Business users: FULL READ ONLY

SWIR302 Offsite Shipment Container Location Report Screen

Description

This report lists containers that are scheduled for offsite shipment for operations personnel. The user enters the offsite manifest number on which to be reported.

Notes

Report Data Element Name	SWITS Database Data Element Name
Offsite Manifest Item No.	SHPITM_ITEM_NUM
DOT Hazard Class	SHPITM_DOT_HAZ_CLASS
Container ID Number	CON_PKG_ID
Container Size	CON_SIZE_DESCR
Gross Weight (kg)	CON_GROSS_WGT
Request Number	CON_REQ_NUM
Generator Name	PERS_NAME
Facility Location	CON_LOCN_FACIL_ID
Profile Number	SHPITM_PROFILE_NUM
Charge Code	CON_SRCE_CHRG_CD
COA	CON_COA
Source Org Code	CON_SRCE_ORG

User Selection: Manifest Number

Data Selection: Offsite shipments as defined by OFFSITE MFST view

Sort Sequence: SHPITM_ITEM_NUM, CON_PKG_ID

Schedule: n/a

Frequency: As needed

Volume: 1-2 pgs

Totals: Count of containers for manifest

Page Break: Conditional page break for SHPITM_ITEM_NUM

Requestor/Org Name: Terri Anderson / Cheryl Edwards, Waste Management Services - Transition Facilities

Special Form/Font: hplsc

Report Distribution: Operations personnel

This script references con_req_num. Currently 'Requests' has been obsoleted.

Business users: FULL READ ONLY

SWIR310 Container Listing Report Screen

Description

The Container Listing Report (SWIR310) produces a complete list of all the data elements pertaining to an individual container. The selection screen permits any combination of selection data including:

? Package ID

? Waste source facility ID

? Waste location facility ID

? Facility Unit

? Facility Quadrant

? Primary Waste Type.

Entry of any or all of the input parameters will cause the report program to select only data that matches user input

Notes

Report Data Element Name	SWITS Database Data Element Name
--------------------------	----------------------------------

General Package Information:

Package ID	CON_PKG_ID
Secondary Package ID	CON_SEC_PKG_ID
Accumulation Date	CON_ACCUM_DT
Packaged Date	CON_PKG_DT
Primary Waste Type	CON_PWTYP_CD
Waste Type Description	PWTYP_DESCR for CON_PWTYP_CD CODE_DESCR for RDET_SWTYP_GROUP
Certification Date	RDET_CERT_DT
Secondary Waste Grp	RDET_SWTYP_GROUP

Ship Date	CON_SHIP_DT
Package Status	CON_PKG_STATUS
Debris Flag	CON_DEBRIS_FLAG
Shipping Deadline	CON_DEADLINE_DT
In HIC Flag	CON_IN_HIC_FLAG
WSRd No / Rev	CON_WSRD / CON_WSRD_REV
Chemical Nature	CODE_DESCR for CHEM_NATURE_CD
TSD Accept Date	CON_TSD_ACCEPT_DT
Req. Or Portfolio #	CON_REQ_NUM
Data Quality Code	CON_DATA_QUAL_CD
Physical State	Concatenation of CODE_DESCR for each character in CON_PHYS_STATE_CD with comma delimiters
Nonconformance Codes	CON_NONCON_CD
Alert Reason	CODE_DESCR for CON_ALERT_REASON_CD
Routine Status	RTN_PCT and '%' and CODE_DESCR for RTN_ROUTINE
Container Type Code / Description	CON_CNTYP_CD CON_SIZE_DESCR
Container Empty Tare Wt.(kg)	CON_TARE_WGT
Container Volume (meters)	CON_CNTR_VOL
Waste Wt. (kg)	CON_WASTE_WGT
Labpack Flag	CON_LABPACK_FLAG
Container Gross Wt.(kg)	CON_GROSS_WGT
Container Contents	CON_GENER_WASTE_DESCR
SWE Comments	CON_SWE_COMMENT
SWO Comments	CON_SWO_COMMENT

Generator Information:

Generating Company	CON_SRCE_CMPNY_ID CMPNY_TITLE for CON_SRCE_CMPNY_ID
Generator ID	CON_GENER_ID
Generator Group	CON_GGRP_ID
Company Type	CON_SRCE_CMPNY_TYPE
Generator	PERS_NAME for CON_GENER_ID
Source Facility	CON_SRCE_FACIL_ID
Charge Code & COA	CON_SRCE_CHARGE_CD CON_COA
Generator Comments	CON_GENER_COMMENT
Additional Comments	CON_ADTL_COMMENT

Hazardous Package Detail:

Waste Status	CODE_DESCR for HDET_WASTE_STATUS
Container Status	CODE_DESCR for HDET_CNTR_STATUS
Flashpoint	HDET_FLASHPOINT
pH Value	HDET_PH
Haz Waste Volume	HDET_WASTE_VOL

Haz Properties	Concatenation of CODE_DESCR for each character in HDET_HAZPROP_CD with comma delimiters
Designation Code	HDET_DESIG_CD
DW Waste Numbers	HDET_DW_NUM
Waste Stream	CON_WASTE_STREAM
Landban Codes	Each character in HDET_LANDBAN delimited by 4 spaces
Subpart CC Flag	HDET_SUBPART_CC
Other Landban #1	HDET_OTHER_LANDBAN_1
Other Landban #2	HDET_OTHER_LANDBAN_2
Other Landban #3	HDET_OTHER_LANDBAN_3

PCB Package Detail:

PCB Type	CODE_DESCR for HDET_PCB_TYPE
PCB Concentration (PPM)	HDET_PCB_PPM
PCB Weight	HDET_PCB_WGT
PCB Subtype	CODE_DESCR for HDET_PCB_SUBTYPE
Removed from Service	HDET_PCB_REMOVED_DT
PCB Contents	HDET_PCB_DESCR
Disposal Date	CON_TREATMENT_DT

Radioactive Package Detail:

Profile Number	RDET_PROFILE_NUM
Combustible Flag	RDET_COMBUST
Shielding	CODE_DESCR for RDET_SHIELD
Thermal Power (w/cu.m.)	RDET_THERMAL_POWER
Seal Number	RDET_SEAL_NUM
Exceeds ISB Limit	RDET_EXCEED_ISB_LIM
Vent Flag	RDET_VENT_FLAG
Dose Rate	RDET_BG_DOSE_RATE
Assay Number	RDET_ASSAY_NUM
Waste Make-up Code	RDET_WASTE_MAKEUP
Handling	CODE_DESCR for RDET_HANDLING
Neutron Dose Rate	RDET_NEUT_DOSE_RATE
Assay Date	RDET_ASSAY_DT
NRC Class	RDET_NRC_CLASS
Tot Alpha (Ci)	RDET_TOT_ALPHA_CI
Waste Category	RDET_WASTE_CAT
Void Space Filler	CODE_DESCR for RDET_VOID_CD
Tot Beta-Gamma (Ci)	RDET_TOT_BG_CI
Tot Pu Equivalent (Ci)	RDET_TOT_PE_CI
RSWIMS Container Cnt	RDET_RSWIMS_COUNT
% Organic Volume	RDET_ORGANIC_VOL_PCT
Tot Pu-FGE	RDET_TOT_PU_FGE

SWIMS Waste Category	CODE_DESCR for RDET_SWIMS_CD
Organic Wt.(kg)	RDET_ORGANIC_WGT
Tot DE-Ci	RDET_TOT_DE_CI
WRAP Category	CODE_DESCR for RDET_WRAP_CAT
Excluded from DE-Ci	RDET_DE_CI_FLAG

Current Location Information:

Facility ID	CON_LOCN_FACIL_ID
Storage Category	CON_SCAT_CD
Tier Level	CON_LOCN_TIER_LVL
Loc'n Beginning Coordinates: N	RDET_BEG_COORD_N
Unit	CON_LOCN_UNIT
Container Alert Code	CON_ALERT_FLAG
Tier Position	CON_LOCN_TIER_POS
Loc'n Beginning Coordinates: W	RDET_BEG_COORD_W
Quadrant	CON_LOCN_SECTION
Location Ending Coordinates: N	RDET_END_COORD_N
Module	CON_LOCN_MODULE
GPS Data Flag	RDET_GPS_FLAG
Location Ending Coordinates: W	RDET_END_COORD_W

Relocation History:

Last Relocation Date	RDET_RELOC_DT
Relocation Date	RELOC_DT
From Facility	RELOC_FROM_FACIL_ID
Unit	RELOC_FROM_UNIT
Quadrant	RELOC_FROM_SECTION

Repackaging History:

Current Container (s)	CONR_TO_PKG_ID & CONR_FROM_PKG_ID
Previous Container(s)	CONR_FROM_PKG_ID & CONR_TO_PKG_ID
Date	CONR_DT
Action Taken	CODE_DESCR for CONR_REL_CD

Isotope Information:

Isotope Number	RAD_ISO_NUM
Isotope Name	ISO_NAME for RAD_ISO_NUM
Alpha Ci	RAD_ALPHA_CI
PE-Ci	RAD_PE_CI
PU-FGE	RAD_PU_FGE
Isotope Activity	RAD_QTY

Unit ISO_UNIT

Waste Component Records:

Component ID	HAZ_COMP_ID
Component Text	HAZ_COMP_TEXT
PPM	HAZ_COMP_PPM
Weight (kg)	HAZ_COMP_WGT
Weight %	HAZ_COMP_WGT_PCT
EPCRA	HAZ_EPCRA_FLAG

Packaging Records:

Content Description	PHYS_COMP_DESCR
Volume %	PHYS_COMP_VOL_PCT
Weight (kg)	PHYS_COMP_WGT

Manifest/Shipping Information:

Type	HPMNT_MFST_TYPE_CD
Manifest #	SHPHST_MFST_NUM
Item	SHPITM_ITEM_NUM
RSR #	SHPHST_RSR_NUM
RSR Type	SHPMNT_RSR_TYPE
DOT Spec	CON_DOT_SPEC
DOT Cat	CON_DOT_TRANS_CAT
Req Num	SHPMNT_REQ_NUM
Shipment Scheduled	SHPMNT_SCHED_DT
Date Shipped	SHPMNT_SHIP_DT
Shipment Arrived	SHPMNT_ARRIVAL_DT
Manifest Returned	SHPMNT_MFST_RET_DT
Tran Cmpny	SHPMNT_TRANSP_CMPNY_ID
Tran Type	SHPMNT_TRANSP_CMPNY_TYPE
Dest Cmpny	SHPMNT_OFFSITE_CMPNY_ID
Dest Type	SHPMNT_OFFSITE_CMPNY_TYPE
Receiving Facility	SHPMNT_RECV_FACIL_ID
Shp Rtn	SHPHST_RETURN

Sort Sequence: CON_PKG_ID

Selection: CON_PKG_ID
 CON_SRCE_FACIL_ID
 CON_LOCN_FACIL_ID
 CON_LOCN_UNIT
 CON_LOCN_SECTI

Notes

Primary Waste Type

: XX

ON CON_PWTYP_CD

Schedule: As requested

Frequency: As needed

Volume: 2-4 pages per CON_PKG_ID (Could be as many as 200 to 300 containers for some runs)

Totals: total HAZ_COMP_WGT, total PHYS_COMP_WGT

Page Break: as required

Requestor: WMP, SWO

Special Form/Font: hp310

Report Distribution: 1 Copy - Internal Use Only

Programmer Notes: All field values print in bold font. This is controlled by the Group highlight field setting.

The field con_req_num has been archived.

Hazardous, PCB, Radioactive, Relocation History, Repackaging History, Isotope, Hazardous Chemical Components, Physical Components, and Manifest/Shipping information sections will only print when data exists. The r310qN_tst queries manage the printing or suppression of these sections.

Most of the ReportWriter Text Objects are not edited on this report. The Field skip, relative position, and spaces before settings control the placement of labels and data values on the non-edited text objects.

SWIR310

Solid Waste Information and Tracking System

MM/DD/YY HH:MI

Page: 99

Container Listing for Package ID: XXXXXXXXXXXXXXXX
for Source Facility: XXXXXXXXXXXXXXXX
Location Facility: XXXXXXXXXXXXXXXX
Unit: XXX Quadrant: XX

Business users: FULL READ ONLY

Printed 5:05 PM 3/1/00

SWIR314 PCB Verification Screen**Description**

The PCB Verification report lists the Toxic Substances Control Act (TSCA) regulated PCB wastes for a specified date range for generator verification. This data will be included in the annual Document Logs.

Screen Data Elements**SWITS database data elements**

Waste Type	PWTYP_DESCR & CODE_DESC for
RDET_SWTYP_GROUP	
Source Facility	CON_SRCE_FACIL_ID
Unique ID Number	CON_PKG_ID
Secondary ID Number	CON_SEC_PKG_ID
Item	CODE_DESCR for HDET_PCB_TYPE
Contents	HDET-PCB_DESCR
PCB Waste Weight (kg)	HDET_PCB_WGT
Removed From Service Date	HDET_PCB_REMOVED_DT
Offsite Manifest Number	SHPMNT_MFST_NUM
Offsite Shipment Date	SHPMNT_SHIP_DT

Sort Sequence: CON_GGRP_ID,
CON_PWTYP_CD,
RDET_SWTYP_GROUP,
CON_SRCE_FACIL_ID
CON_PKG_ID

Selection: All Generator Groups (default) or user specified Generator Group.

Will accept wildcards in Generator Group for pattern matching.

Removed From Service Date is in the user defined range.

Data Selects: CON_PWTYPCD in ('P', 'HP', 'MP', 'RP')
HDET_PCB_PPM in ('50-499', '>499')
CON_PKG_STATUS <> 'R'

Schedule: n/a

Frequency: Annual

Volume: n/a

Page Break: CON_GGRP_ID

Requestor/Org Name: DL Hagel, SWM

Special Form/Font: hplsn

Report Distribution: Generator

Programmer Notes: Secondary waste type group and description will only be present when primary waste type is ?MP?. Selection of containers is based upon the original container ship date

(nvl(CON_SHIP_DT, CON_TSD_ACCEPT_DT)). The Shipment Date displayed for each container, when present, is the Offsite ship date as defined by the OFFSITESHIP view.

Business users: FULL READ ONLY

SWIR315 Generator Verification by Gen Group Screen

Notes

1. Generator Verification by Generator Group Report (SWIR315)

The Generator Verification by Generator Group Report (SWIR315) provides a list of hazardous or mixed wastes shipped for a given time period ordered by Generator Group. CERCLA waste that has not been assigned a waste stream is excluded. The format is similar to the R316 report.

Report Data Element Name	SWITS Database Data Element Name
Facility	CON_SRCE_FACIL_ID
Manifest #	SHPHST_MFST_NUM
Item #	SHPHST_ITEM_NUM
Package ID	CON_PKG_ID
Sec. Pkg ID	CON_SEC_PKG_ID
Waste Code(s)	HDET_DW_NUM
Weight (kg)	CON_WASTE_WGT
Waste Stream Code	STRM_CD
Waste Stream Description	STRM_DESCR

Sort Sequence: CON_GGRP_ID
 SHPHST_MFST_NUM
 SHPHST_ITEM_NUM
 CON_PKG_ID
 CON_SRCE_FACIL_ID

Selection: All Generator Groups (default), or specified Generator Group.
 CON_SHIP_DT (or CON_TSD_ACCEPT_DT when ship date is null) is in the user defined range.
 CON_PWTYP_CD is like user entry.

Data Selects: CON_PKG_STATUS <> ?R?,
 SHPMNT_MFST_TYPE_CD not in (?RSR?, ?TSD?),
 Not (GGRP_YN3 = ?CERCLA? and CON_YN3 = ?Y? and CON_WASTE_STREAM is NULL)

Schedule: n/a
 Frequency: biannual/request
 Volume: 30 - 50 pages
 Page Break: CON_GGRP_ID
 Requestor/Org Name: DL Hagel, WMP

Special Form/Font: hplsn
 Report Distribution: Generator

Business users: FULL READ ONLY

SWIR317 Waste Stream Audit Report Screen

Notes

Note: The previous version of report SWIR317 has been removed from the application. This version reuses that report number.

1. Waste Stream Audit Report (SWIR317)

The Waste Stream Audit Report (SWIR317) provides a list of hazardous or mixed waste packages to which dangerous waste numbers have been assigned that are not included in the waste streams associated with packages. CERCLA waste that has not been assigned a waste stream is excluded. A second section shows packages that have waste designation codes that conflict with the waste designation codes associated with their waste streams. The third section of the report lists packages for which the labpack flag setting contradicts the type of waste stream. A sample layout is shown in Figure X.XX.

Report Data Element Name	SWITS Database Data Element Name
Generator Group	GGRP_ID
Package ID	CON_PKG_ID
Sec. Pkg ID	CON_SEC_PKG_ID
Package Status	CON_PKG_STATUS
Ship/Accept Date	CON_SHIP_DT
Pkg DW Numbers	HDET_DW_NUM
Waste Stream DW Numbers	STRM_EPA_CD STRM_WDOE_CD
Strm Code	STRM_CD
Waste Stream Description	STRM_DESCR
Pkg Desig Code	HDET_DESIG_CD
Strm Desig Code	STRM_DESIG_CD
Labpack Flag	CON_LABPACK_FLAG

Sort Sequence: CON_GGRP_ID
 CON_PKG_ID

User Selection: All Generator Groups (default), or specified Generator Group.

For ?A?, ?S? and ?T? status containers, the CON_SHIP_DT or CON_TSD_ACCEPT_DT is in the user defined range (see data selects below).

Data Selects: Criteria for all report groups -

CON_PKG_STATUS is ?G?, ?E?, ?F?, ?A?, ?S? or ?T?.

Not (GGRP_YN3 = ?CERCLA? and CON_YN3 = ?Y? and CON_WASTE_STREAM is NULL).

When the primary waste type is Mixed (CON_PWTYP_CD = ?M? or ?MP?) and the package status is ?A?, ?S? or ?T? then CON_TSD_ACCEPT_DT must be in the date range specified by the user.

For Hazardous waste (CON_PWTYP_CD = ?H? or ?HP?) in ?A?, ?S? or ?T? status the CON_SHIP_DT must be in the date range specified by the user.

The date range criterion is not applied to ?G?, ?E? or ?F? status containers.

Additional criteria for the first report group -

CON_LABPACK_FLAG is not ?Y?.

STRM_FORM_CD is not ?B009?.

Any DW number in HDET_DW_NUM is not in either STRM_EPA_CD or STRM_WDOE_CD.

Additional criteria for the second report group -

HDET_DESIG_CODE does not map to an equivalent value for STRM_DESIG_CODE.

Additional criteria for the third report group -

CON_LABPACK_FLAG and STRM_FORM_CD values contradict each other.

If CON_LABPACK_FLAG is ?Y?, then STRM_FORM_CD must be ?B009?.

Schedule: n/a
Frequency: request
Volume: 1 - 50 pages
Page Break: GGRP_ID
Requestor/Org Name: DL Hagel, RFSH
Special Form/Font: hplsc
Report Distribution: Generator

Business users: FULL READ ONLY

SWIR322 DOE Verification Screen

Notes

1. DOE Waste Verification Report (SWIR322)

Report SWIR322 provides DOE with a report of the hazardous waste sorted by the source facility in which the waste resides or last resided, if it has been shipped offsite. CERCLA waste that has not been assigned a waste stream is excluded. A sample report layout is shown in Figure 7-xx.

Report Data Element Name SWITS Database Data Element Name

Manifest Number	SHPHST_MFST_NUM
Item Number	SHPHST_ITEM_NUM
Package ID	CON_PKG_ID
Waste Numbers	HDET_DW_NUM
Accum Dt	CON_ACCUM_DT
Desig Code	HDET_DESIG_CD
Waste Weight (kg)	CON_WASTE_WGT
Waste Stream Code	STRM_CD
Waste Stream Description	STRM_DESCR
Offsite Manifest Number	SHPHST_MFST_NUM
Offsite Ship Date	SHPHST_SHIP_DT

User Selection: CON_SHIP_DT, or CON_TSD_ACCEPT_DT if ship date is null, in specified range

CON_SRCE_CMPNY_ID, wildcard pattern matching supported

CON_SRCE_FACIL_ID, wildcard pattern matching supported

Waste type of ?H? or ?M?

Data Selects: If waste type selection (above) is ?H? then CON_PWTYP_CD in (?H?, ?HP?) or CON_PWTYP_CD in (?M?, ?MP?, ?CM?) and CON_LOCN_FACIL_ID <> 616 for Waste type selection ?M?.

SHPMNT_MFST_TYPE_CD <> ?RSR? or ?TSD?.

CON_PKG_STATUS <> ?R?.

Not (GGRP_YN3 = ?CERCLA? and CON_YN3 = ?Y? and CON_WASTE_STREAM is NULL).

Sort Sequence: CON_SRCE_CMPNY_ID, CON_SRCE_FACIL_ID, SHPHST_MFST_NUM, SHPHST_ITEM_NUM, CON_PKG_ID

Frequency: As requested

Volume: Varies with input.

Page Break: CON_SRCE_CMPNY_ID, CON_SRCE_FACIL_ID

Requestor/Org Name: DL Hagel, WMP

Special Format/Font: hplsn

Business users: FULL READ ONLY

SWIR327 Monthly Radioactive Waste Billing Report

Screen

No Text

Business users: FULL READ ONLY

SWIR328A EP125: Summary Waste Volumes and Weights since 1944

Screen

Description

Section B of the annual EP-125 Radioactive Inventory Report. Reports total waste volumes and weights of Uranium, Plutonium, and other isotopes (in grams) for all RAD waste types (unsegregated, low-level, transuranic / high level) accumulated since Hanford start-up.

Business users: FULL READ ONLY

SWIR328ABC EP125: Process Script

Description

Creates temporary tables to support sections A,B,C of the EP125annual RAD inventory report.

Business users: FULL READ ONLY

SWIR328B EP125: Summary Curies and MAP contributions since 1944 Screen

Description

Section B of the annual EP-125 Radioactive Inventory Report. Reports summary and individual total curies of Ru-106, Sr-90, Cs-137 and other isotopes for all RAD waste types (unsegregated, low-level, transuranic / high level) accumulated since Hanford start-up..

Business users: FULL READ ONLY

SWIR328C Summary Decayed Curies Screen

Description

Section C of the annual EP-125 Radioactive Inventory Report. Reports the RAD contribution of decayed isotopes for all waste types, accumulated since Hanford start-up.

Business users: FULL READ ONLY

SWIR328CAISSONS EP125: Process Script

Description

Creates tables for the EP125 report for a special addendum to sections a-c which breaks out facility 218W4B into its component units for CAISSONS.

Business users: FULL READ ONLY

SWIR328D EP125: USG Waste Volumes and Weights Screen

Description

Section D of the annual EP-125 Radioactive Inventory Report. Reports waste volumes and weights of Uranium, Plutonium, and other isotopes (in grams) for Unsegregated wastes.

Business users: FULL READ ONLY

SWIR328DELNULLS EP125: Process Script

Description

Deletes data rows from the EP125 master tables which have NULL values for critical fields. The script is run as a cleanup step before attempting to generate the EP125 reports from the SWIR328ABC, SWIR328, SWIR328ABC_CAISONS and SWIR328O scripts.

Business users: FULL READ ONLY

SWIR328DP R328DP Screen

Description

Produces a list of daughter product isotope numbers to be excluded when generating the report tables for Undecayed curies (sections B,E,H,K,N)

SWIR328E EP125: USG Curies and MAP contributions Screen

Description

Section E of the annual EP-125 Radioactive Inventory Report. Reports summary and individual total curies of Ru-106, Sr-90, Cs-137 and other isotopes for Unsegregated wastes.

Business users: FULL READ ONLY

SWIR328F EP125: USG Decayed Curies Screen

Description

Section F of the annual EP-125 Radioactive Inventory Report. Reports the RAD contribution of selected decayed isotopes for Unsegregated wastes.

Business users: FULL READ ONLY

SWIR328G EP125: LLW Waste Volumes and Weights Screen

Description

Section G of the annual EP-125 Radioactive Inventory Report. Reports waste volumes and weights of Uranium, Plutonium, and other isotopes (in grams) for Low Level wastes.

Business users: FULL READ ONLY

SWIR328H LLW Curies and MAP contributions Screen

Description

Section H of the annual EP-125 Radioactive Inventory Report. Reports summary and individual total curies of Ru-106, Sr-90, Cs-137 and other isotopes for Low Level wastes.

Business users: FULL READ ONLY

SWIR328I EP125: LLW Decayed Curies Screen

Description

Section I of the annual EP-125 Radioactive Inventory Report. Reports the RAD contribution of selected decayed isotopes for Low Level wastes.

Business users: FULL READ ONLY

SWIR328J EP125: TRU Waste Volumes and Weights Screen**Description**

Section J of the annual EP-125 Radioactive Inventory Report. Reports waste volumes and weights of Uranium, Plutonium, and other isotopes (in grams) for Transuranic / High Level wastes.

Business users: FULL READ ONLY

SWIR328K EP125: TRU Curies and MAP contributions Screen**Description**

Section K of the annual EP-125 Radioactive Inventory Report. Reports summary and individual total curies of Ru-106, Sr-90, Cs-137 and other isotopes for Transuranic wastes.

Business users: FULL READ ONLY

SWIR328L EP125: TRU Decayed Curies Screen**Description**

Section L of the annual EP-125 Radioactive Inventory Report. Reports the RAD contribution of selected decayed isotopes for Transuranic and High Level wastes.

Business users: FULL READ ONLY

SWIR328M Summary Waste Volumes and Weights Screen**Description**

Section M of the annual EP-125 Radioactive Inventory Report. Reports total waste volumes and weights of Uranium, Plutonium, and other isotopes (in grams) for all RAD waste types (unsegregated, low-level, transuranic / high level) accumulated during the current year.

Business users: FULL READ ONLY

SWIR328N Summary Curies and MAP contributions Screen**Description**

Section N of the annual EP-125 Radioactive Inventory Report. Reports summary and individual total curies of Ru-106, Sr-90, Cs-137 and other isotopes for all RAD waste types (unsegregated, low-level, transuranic / high level).

Business users: FULL READ ONLY

SWIR328NULL EP125: Data Verification Report Screen**Description**

Displays RAD data rows that will not be reported correctly by the EP125 report due to NULL values in one or more columns. The process can be run recursively.

Business users: FULL READ ONLY

SWIR3280 EP125: Rollup Annual RAD Activity Screen**Description**

Combines the results shown on SWIR328 sections M and N into one report. Reports total volumes, weights and curies by facility and waste type, received during the year.

Business users: FULL READ ONLY

SWIR328OSQL EP125: Process Script Screen**Description**

Creates and populates three temporary tables to support the SWIR328o report.

Business users: FULL READ ONLY

SWIR328SQL R328SQL Screen**Description**

Script which calculates the RAD quantities for sections D-N of the EP125 report, based on runtime inputs of the secondary waste type group (LLW, TRU, USG) and a TSD accept date range.

The results of each run are stored in separate tables, named "ep125_< secondary waste_type >_< 1,2,3,error >", so 9 tables are created in all.

Sections d,e,f are based on swtyp_group = 'USG', '
g,h,i are based on swtyp_group = 'LLW',
j,k,l are based on swtyp_group = 'TRU' OR 'HLW',
m,n are for all swtyp_groups - i.e '%'

The similarities between the sections are as follows:

d, g, j and m cover volume, pkd volume and grams of U, PU and other isotopes
e, h, k and n cover curies for total, sr90, ru106, cs137 and other isotopes, plus calculated MAP contributions
f, i and l are the same as e/h/k except they are for decayed ci.

Note there is no corresponding decay portion for m,n.

Business users: FULL READ ONLY

SWIR330 Uniform Hazardous Waste Manifest Screen

No Text

Business users: FULL READ ONLY

SWIR333 PCB Annual Document Log (Radioactive) Screen**Description**

This report records the radioactive PCB waste management activities for a calendar year. The log consists of two sections. The first section summarizes the radioactive PCB waste placed into storage for disposal and transported for disposal during the selected calendar year. The second section is an inventory section that details individual PCB articles, PCB article containers, and PCB containers stored at facilities (awaiting disposal) at the end the year. The PCB removed from service date indicates when PCB waste is 'placed into storage'.

Report Data Element Name	SWITS Database Data Element Name
--------------------------	----------------------------------

-- Summary Section --

PCB Item Types	decode(HDET_PCB_SUBTYPE)
PCB Item Type Counts	Count by HDET_PCB_SUBTYPE
PCB Item Type Weights	Sum of HDET_PCB_WGT by HDET_PCB_SUBTYPE

-- Inventory Section --

Stored At Facility	For TSD_ACCEPT_DT <= Reporting Year (YYYY) If TFAC_CLASS of CON_LOCN_FACIL_ID = 'CWC' then 'CWC' else CON_LOCN_FACIL_ID
	For TSD_ACCEPT_DT > Reporting Year (YYYY) If TFAC_CLASS of CON_SRCE_LOCN_ID = 'CWC' then 'CWC' else CON_SRCE_FACIL_ID

Inbound Manifest Number	decode(SHPMNT_MFST_TYPE_CD = 'REC' then
SHPHST_MFST_NUM else NULL)	
Mfst Item	decode(SHPMNT_MFST_TYPE_CD = 'REC' then
SHPHST_ITEM_NUM else NULL)	
Item	CODE_DESCR for HDET_PCB_TYPE
Unique ID Number	CON_PKG_ID
Contents	HDET_PCB_DESCR
PCB Waste Wt (Kg)	HDET_PCB_WGT
Date Removed From Service	HDET_PCB_REMOVED_DT
Transport Date	decode(SHPMNT_MFST_TYPE_CD = 'REC' then
SHPMNT_SHIP_DT else NULL)	
Disposal Date	CON_TREATMENT_DT

Sort Sequence: (Inventory Section) Stored At Facility, Date Removed From Service, Unique ID Number

User Selection: -- Placed Into Storage for Disposal Summary --

HDET_PCB_REMOVED_DT = Reporting Year (YYYY)

-- Transported for Disposal Summary --

SHPMNT_SHIP_DT = Reporting Year (YYYY)

-- Inventory Section --

HDET_PCB_REMOVED_DT <= Reporting Year (YYYY)

Data Selects: -- All sections --

CON_PWTYP_CD in ('MP','RP'),

CON_PKG_ID NOT LIKE 'BL%'

HDET_PCB_PPM IN ('50-499', '> 499')

CON_CNTYP_CD <> 'SA'

CON_PKG_STATUS <> 'R'

-- Transported for Disposal Summary --

Waste shipped offsite (join with OFFSITESHIP view)

Frequency: As requested (annually)

Volume: 10 pages

Totals: Elements listed in Summary section

Page Break: Between sections and as needed in Inventory section

Requestor: John Dawson (for DOE-RL)

Special Form/Font: hp333

YYYY PCB ANNUAL DOCUMENT LOG (Radioactive)

Year Ending: December 31, YYYY

U.S. Department of Energy - Richland Operations Office

P.O. Box 550, 2355 Stevens - Richland, WA 99352

EPA ID No. WA7890008967

PLACED INTO STORAGE FOR DISPOSAL

TOTAL NUMBER OF PCB ARTICLES	TOTAL PCB WEIGHT
99999 PCB Capacitors	999999999.99 Kilograms
99999 PCB Transformers	999999999.99 Kilograms
99999 PCB Contam. Elec. Equip	999999999.99 Kilograms
TOTAL NUMBER OF PCB ARTICLE CONTAINERS	TOTAL PCB WASTE WEIGHT
99999 PCB Article Containers	999999999.99 Kilograms
TOTAL NUMBER OF PCB CONTAINERS	TOTAL PCB WASTE WEIGHT

Printed 5:05 PM 3/1/00

99999 PCB Containers

999999999.99 Kilograms

BULK PCB WASTE

TOTAL WEIGHT

999999999.99 Kilograms

TRANSPORTED FOR DISPOSAL

TOTAL NUMBER OF PCB ARTICLES

TOTAL PCB WEIGHT

99999 PCB Capacitors

999999999.99 Kilograms

99999 PCB Transformers

999999999.99 Kilograms

99999 PCB Contam. Elec. Equip

999999999.99 Kilograms

TOTAL NUMBER OF PCB ARTICLE CONTAINERS

TOTAL PCB WASTE WEIGHT

99999 PCB Article Containers

999999999.99 Kilograms

TOTAL NUMBER OF PCB CONTAINERS

TOTAL PCB WASTE WEIGHT

99999 PCB Containers

999999999.99 Kilograms

BULK PCB WASTE

TOTAL WEIGHT

999999999.99 Kilograms

Business users: FULL READ ONLY

SWIR334 PCB Annual Document Log (Non-Rad) Screen

No Text

Business users: FULL READ ONLY

SWIR335 Annual PCB Trench 94 Report Screen

Description

This report records the radioactive PCB waste management activities at the Low-Level Burial Grounds, 218-E-12B, Trench 94 (a proposed chemical waste landfill) for the calendar year. This PCB waste is contained in the decommissioned naval reactor compartments placed in Trench 94.

Notes

Report Data Element Name SWITS Database Data Element Name

Manifest No.	SHPMNT_MFST_NUM
PCB Waste Generator	CMPNY_TITLE
Generator US EPA ID Number	CMPNY_EPA_ID
Count of PCB Items	HDET_PCB_SUBTYPE
Weight of PCB Items	HDET_PCB_WGT
-- Document Log --	
Manifest Number	SHPMNT_MFST_NUM
Generating Facility	CMPNY_TITLE
PCB Article ID Number	CON_PKG_ID
Contents	SUBSTR(CON_PKG_ID)
PCB Waste Weight (Kg)	HDET_PCB_WGT
Date Removed From Service	HDET_PCB_REMOVED_DT
Date Received	CON_TSD_ACCEPT_DT
Confirmed Date of Disposal	CON_TREATMENT_DT

Sort Sequence: SHPMNT_MFST_NUM

Selection: Report Year, entered as YYYY.

Data Selects: For LIST OF MANIFESTS FOR NAVAL REACTOR COMPARTMENTS

SHPMNT_MFST_TYPE_CD = 'REC', CON_CNTYP_CD = 'SA'
CMPNY_TYPE = 'GEN', CON_TSD_ACCEPT_DT = Year Entered

For PCB WASTE IN STORAGE AT BEGINNING OF YEAR

SHPMNT_MFST_TYPE_CD = 'REC', CON_CNTYP_CD = 'SA'
CON_TSD_ACCEPT_DT < Year Entered

For PCB WASTE RECEIVED/GENERATED DURING THE YEAR

SHPMNT_MFST_TYPE_CD = 'REC', CON_CNTYP_CD = 'SA'
CON_TSD_ACCEPT_DT = Year Entered

For PCB WASTE TRANSFERRED FROM TRENCH 94 TO OFFSITE DISPOSAL

SHPMNT_MFST_TYPE_CD = 'OFF', CON_CNTYP_CD = 'SA'
SHPMNT_SHIP_DT = Year Entered

For PCB WASTE DISPOSED AT TRENCH 94

SHPMNT_MFST_TYPE_CD = 'REC', CON_CNTYP_CD = 'SA'
CON_TREATMENT_DT = Year Entered

For PCB WASTE IN STORAGE AT END OF YEAR

SHPMNT_MFST_TYPE_CD = 'REC', CON_CNTYP_CD = 'SA'
CON_TREATMENT_DT IS NULL, CON_TSD_ACCEPT_DT <= Year Entered

For PCB ANNUAL DOCUMENT LOG

SHPMNT_MFST_TYPE_CD = 'REC', CON_CNTYP_CD = 'SA'
CMPNY_TYPE = 'GEN', CON_TSD_ACCEPT_DT = Year Entered

Page Break: As required
Requestor: John Dawson (for DOE-RL)
Special Form/Font: hp335

Business users: FULL READ ONLY

SWIR340 Solid Waste Management Receipt Screen

Description

The Solid Waste Management Receipt (SWIR340) report lists the containers received at TSD facilities by Dates and Facility.

Notes

Report Data Element Names	Database Element Names
TSD Facility Location	TFAC_CLASS
Group ID	CON_GGRP_ID
Waste Type	CON_PWTYP_CD
Container Type	CON_CNTYP_CD
Container Description	CNTYP_DESCR
Total Containers	count(*)
Volume (ft3)	CON_CNTR_VOL (converted to cubic feet)
Sort Sequence:	TFAC_CLASS, CON_GGRP_ID, CON_PWTYP_CD
Selection:	Start Date, End Date, TSD
Facility Location	
Schedule:	n/a
Frequency:	As required
Volume:	12 to 15 pages
Totals:	n/a
Page Break:	None
Requestor/Org Name:	D.L. Hagel
Special Form/Font:	hpstd

This report uses a temporary table created by fill_r340_table.sql, which contains the list of package IDs to be used in the report. See inline comments in this SQL script for more information.

Business users: FULL READ ONLY

SWIR341 SEN 37-92 Waste Minimization Report Screen

Description

This report generates the SEN 37-92 Pollution Prevention Report, also referred to as the Waste Minimization Report on the SWITS application reports menu. The R341 is generated from two queries. The queries are differentiated by the waste categories produced in each.

Notes

1. SEN 37-92 Waste Minimization Report (SWIR341)

This report generates the SEN 37-92 Pollution Prevention Report, also referred to as the Waste Minimization Report on the SWITS application reports menu. The R341 is generated from two queries. The queries are differentiated by the waste categories produced in each. A sample report is shown in Figure 7-X.

Report Data Element Name	SWITS Database Data Element Name
Contractor	CON_SRCE_CMPNY_ID
Category	Query #1 - HIGH LEVEL, TRU, LLW, TRUM, MLLW, MTSCA, or UNKNOWN Query #2 - RCRA, WASH HAZ, or TSCA
(See Programmer Notes)	
Routine	RTN_ROUTINE
Facility	CON_SRCE_FACIL_ID
Package ID	CON_PKG_ID
Type	CON_SRCE_CMPNY_TYPE (query #2 only)
PW Typ	CON_PWTYP_CD
Rout. %	RTN_PCT
Volume of Rout. %	CON_CONTR_VOL * (RTN_PCT / 100) (query #1 only)
Waste Wgt of Rout. %	CON_WASTE_WGT * (RTN_PCT / 100) (query #2 only)
Strm	CON_WASTE_STREAM
Stream Name	STRM_NAME

Sort Sequence:

Sort option #1 CON_SRCE_CMPNY_ID, waste type, CON_ROUTINE,
CON_SRCE_FACIL_ID, CON_PKG_ID (for non-haz)

Sort option #2 CON_SRCE_CMPNY_ID, waste type, RTN_ROUTINE,
CON_SRCE_FACIL_ID, CON_WASTE_STREAM, CON_PKG_ID (for non-haz)

User Selection: CON_TSD_ACCEPT_DT, CON_SRCE_CMPNY_ID and CON_SRCE_FACIL_ID.
Each will default to all when not specified by the user.

Data Selects:

Query #1 Rad and Mixed waste (RADWASTE view),

CON_PKG_ID not like 'BL-%', CON_PKG_STATUS in ('K','T','X','A','E','S','G'),
CMPNY_TYPE = 'GEN', and CMPNY_LOCATION = 'ON'.

Query #2 Haz and/or PCB waste placed on offsite manifests
(HAZWASTE and OFFSITESHIP views),

CON_PWTYP_CD in (H, HP, P),
CON_PKG_STATUS not in (R, P, U, V, C, M, N),
CMPNY_TYPE = 'GEN', and CMPNY_LOCATION = 'ON'.

Schedule: n/a
Frequency: as Required
Volume: 1 - 300 pages
Totals: n/a
Page Break: As needed
Requestor: Pete Segall
Org Name: Waste Minimization - RFSH
Special Form/Font, etc: hpptc
Report Distribution: 1 copy - Internal Use Only

Programmer Note:

Values for the category field are generated in the queries for
each of the two distinct parts of the report.

Query #1 (Rad and Mixed Waste) -

If SWTYP_CD = '4A' then HIGH LEVEL
else
if PWTYP_CD = 'R' then TRU or LLW depending on SWTYP_GROUP
else
if PWTYP_CD = 'M' or 'CM' then TRUM or MLLW depending on
SWTYP_GROUP
else
if PWTYP_CD = 'MP' or 'RP' and PCB_PPM = '50-499' or '>499'
then MTSCA
else

```
if PWTYP_CD = 'MP' or 'RP' and PCB_PPM is not = '50-499' or
  '>499' then TRUM or MLLW depending on SWTYP_GROUP
else
  (none of the above) then UNKNOWN
```

Query #2 (Haz and/or PCB Waste) -

```
If PWTYP_CD = 'P' then TSCA
else
  if the first DW_NUM starts with a 'W' then WASH HAZ
else
  then RCRA
```

Business users: FULL READ ONLY

SWIR342 Annual Dangerous Waste Report Screen

Description

Creates the Annual Dangerous Waste Report by creating a temporary table (R342_TABLE) then executing the R342 report against the new table. The script to create the temporary table is called FILL_R342_TABLE.SQL

The Annual Dangerous Waste Report reports all regulated dangerous waste generated during the calendar year in accordance with state dangerous waste regulations.

Due to the necessity of including data from Pacific Northwest National Laboratory (PNNL) as if this information was in SWITS, a set of temporary tables are created to combine data from SWITS with PNNL's submission. Table R344_STREAM corresponds to SWITS table STREAM, R342_WASTE corresponds to WASTE, R342_ALLSHIP corresponds to the ALLSHIP view, and R342_OFFSHIP corresponds to the OFFSITESHIP view. Script fill_r342_table.sql is executed to create these tables at the time report SWIR342 is run.

Notes

Report Data Element Name SWITS Database Data Element Name

Generation and Management Form:

EPA/State ID Number Hardcoded in text panel as "WA7890008967"

Site Name Hardcoded in text panel as "HANFORD FACILITY"

A-1	STRM_CD
A-2	STRM_DESCR
A-3	STRM_EPA_CD
A-4	STRM_WDOE_CD
A-5	STRM_DESIG_CD

- A-6 "Y" if STRM_CD begins with "M", otherwise "N"
- A-7 STRM_SRCE_CD
- A-8 STRM_FORM_CD
- A-9 STRM_ORIGIN_CD
- A-9a STRM_RESIDUAL_CD
- B-1 Sum of CON_WASTE_WGT or TSD_CY_WGT for current STRM_CD (A-1)
- B-2 STRM_MANAGE_LOCN
- B-3 0 if STRM_MANAGE_LOCN = 'OFF', otherwise same value as B-1
- B-3a STRM_GENER_TREAT
- B-4i CMPNY_EPA_CD
- B-4ii STRM_SYSTEM_CD
- B-4iii Sum of CON_WASTE_WGT for current STRM_CD (A-1), CMPNY_EPA_ID (B-4i) and STRM_SYSTEM_CD (B-4ii)
- B-4iv Not used
- C-1 "N" if STRM_WASTE_MIN is null, otherwise "Y"
- C-2 STRM_INCREASE
- C-3 STRM_RECYCLED
- C-4 STRM_REDUCE_QTY
- D STRM_CONTENTS
- B-5i SHPMNT_SHIP_DT
- B-5ii First 5 characters of SHPMNT_MFST_NUM
- B-5iii Not used
- B-5iv CMPNY_EPA_ID
- B-5v Sum of CON_WASTE_WGT for current STRM_CD (A-1) and manifest (B-5ii)

Off-Site Identification Information Form:

EPA/State ID Number Hardcoded in text panel as "WA7890008967"
 Site Name Hardcoded in text panel as "HANFORD FACILITY"
 EPA ID Number CMPNY_EPA_ID
 Name CMPNY_TITLE
 Address CMPNY_STREET, CMPNY_CITY, CMPNY_STATE_CD, CMPNY_ZIP_CD
 Handler Type "Generator" if CMPNY_TYPE is "GEN", "Transporter" if CMPNY_TYPE is "TRA", otherwise "TSDR"
 Comments Not used

Waste Received Form:

EPA/State ID Number Hardcoded in text panel as "WA7890008967"
 Site Name Hardcoded in text panel as "HANFORD FACILITY"

- 1 STRM_CD
- 2 STRM_DESCR
- 3 STRM_EPA_CD
- 4 STRM_WDOE_CD
- 5 STRM_DESIG_CD

6 "Y" if STRM_CD begins with "M", otherwise "N"
 7 STRM_FORM_CD
 8 Sum of CON_WASTE_WGT for current STRM_CD (1)
 8a Not used
 9i CON_TSD_ACCEPT_DT
 9ii First 5 characters of SHPMNT_MFST_NUM
 9iii Not used
 9iv CMPNY_EPA_ID
 9v Sum of CON_WASTE_WGT for current CON_TSD_ACCEPT_DT (9i), SHP
 MNT_MFST_NUM (9ii), CMPNY_EPA_ID (9iv), STRM_SYSTEM_CD (9vi), an
 d STRM_CD (1)
 9vi STRM_SYSTEM_CD
 10 STRM_COMMENTS

Sort Sequences:

Generation and Management Form: STRM_CD, SHPMNT_SHIP_DT, SHPMNT_MFST_NUM, CMPNY_EPA_ID, CON_WASTE_STREAM

Off-Site Identification Information Form:

CMPNY_EPA_ID (based on SELECT DISTINCT)

Waste Received Form: STRM_CD

Selection: CON_TSD_ACCEPT_DT or CON_SHIP_DT in user-specified range

Data Selects: Note: Overall data selects are established by script fill_r342_table.sql when it creates the temporary tables used in this report. The data select descriptions below apply to individual sections of the report.

Generation and Management Form: Include waste streams where

1) STRM_SRCE_LOCN <> 'OFF' and waste stream has one or more packages with:

CON_SHIP_DT in user-specified range and
 CON_PWTYP_CD in ('M', 'MP') and
 CMPNY_TYPE = 'GEN' and
 CMPNY_LOCATION = 'ON'

union

2) Waste stream has one or more packages with:

SHPMNT_SHIP_DT in specified range and manifest is an offsite type and

CMPNY_TYPE = 'TSD'

union

3) Waste streams in UNCONTAIN table with:

TSD_STRM_CD is not null and
TSD_CY_WGT > 0

Off-Site Identification Information Form:

Include company information where

1) CMPNY_TYPE = 'TSD' and it was the destination for at least one offsite shipment containing at least one package with:

CON_TSD_ACCEPT_DT in specified range and
CON_PWYTP_CD in ('H','HP','M','MP')

union

2) CMPNY_TYPE = 'GEN' and the company is the source of at least one 'REC' type manifest containing at least one package with:

CON_TSD_ACCEPT_DT in specified range and
CON_PWYTP_CD in ('H','HP','M','MP') and
STRM_SRCE_LOCN <> 'ON'

union

3) CMPNY_TYPE = 'TRA' and the company ID appears as SHPMNT_TRANSP_CMPNY_ID on

Notes

at least one manifest with SHPMNT_SHIP_DT in the specified range which includes at least one package with CON_PWYTP_CD in ('H','HP','M','MP')

minus

4) CMPNY_EPA_ID = 'WA7890008967' to force the exclusion of Hanford from this section

Waste Received Form: Include waste streams where there is at least one manifest where SHPMNT_MFST_TYPE_CD = 'REC' which includes at least one package with:

CON_TSD_ACCEPT_DT in specified range and
 CON_PWYTP_CD in ('H','HP','M','MP') and
 STRM_SRCE_LOCN <> 'ON'

Schedule: manual
 Frequency: annual
 Volume: 300 - 500 pages
 Totals: none
 Page Break: STRM_CD
 Requestor/Org name: DL Hagel, SWE
 Special Form/Font: hp342 and Barcodes and More font cartridge
 Report Distribution: DOE
 Programmer Notes: See script fill_r342_table.sql documentation in Appendix ???.
 Page numbering begins at an arbitrary number established by users. This
 constant is entered as a runtime parameter and is added to the Reportwriter page number
 value before displaying the result.

Business users: FULL READ ONLY

SWIR342E Create ADWR Electronic Data Feed

Description

Entry point for producing data files from the Annual Dangerous Waste Report tables. The output is loaded into Turbo Waste?, an application supplied by the WDOE. This routine is run after the R342 report, which creates a temporary table, called R342_TABLE, before running the report.

After creating the R342_TABLE, the script /h/Swits/Eadwr/EADWR_DRIVER_YYYY is run, calling these PL/SQL scripts:

```
fill_eadwr_tables.sql
build_ascii_file.sql
count_eadwr.sql
comment_overflow.sql
drop_tables.sql
```

SWIR354 PCB Compliance Report Screen

Description

Report SWIR354 displays a list of packages containing PCBs which have PCB removed from service dates within a specified range.

Notes

Report Data Element Name	SWITS Database Data Element Name
Item	none - running count of report package detail records
Qty	none - hardcoded '1'
PCB Waste Description CODE_DESCR	for HDET_PCB_SUBTYPE

ID# CON_PKG_ID
 Total Wt (kg) HDET_PCB_WGT
 Contaminant if CON_PWTYP_CD = 'RP' then 'R'
 if CON_PWTYP_CD = 'MP' then 'H,R'
 Waste Form Concatenation of CODE_DESCR for each character in
 CON_PHYS_STATE_CD with comma delimiters
 Date Put in Storage HDET_PCB_REMOVED_DT
 Currently Exceeds 1yr Limit 'Y' if removed more than 1 yr ago
 Will Exceed 1yr Limit 'Y'
 Storage Bldg # CON_LOCN_FACIL_ID
 Waste Shipped To Other Site 'N'
 Sort Sequence: HDET_PCB_REMOVED_DT, CON_PKG_ID
 User Selection: HDET_PCB_REMOVED_DT in the specified range.
 Data Selection: Hazardous waste in TSD custody (HAZTSDWASTE view)
 CON_PWTYP_CD in ('RP','MP').
 HDET_PCB_PPM in ('50-499','>499').
 CON_CNTYP_CD <> 'SA'.
 Frequency: As requested
 Volume: Varies with input.
 Page Break: N/A
 Requestor/Org Name: DL Hagel
 Special Format/Font: hplsc
 Programmer Note: Sequential item numbers are generated by ReportWriter using the R_count
 function for the computed field ROWNUM.

Additional logic will print '* Not Available *' for the PCB Waste Description if the
 HDET_PCB_SUBTYPE is not found on the Miscellaneous Codes table.

Business users: FULL READ ONLY

SWIR356 Receipt Report -- Waste Acceptance Screen

Description

TSD Receipt Report. Used at T-Plant, per conversation with Ron Everham

Business users: TSD OPERATIONS, VERIFICATION, TSD REPRESENTATIVE

SWIR400 Isotope Table Screen

Description

A list of most elements in the Isotope Table

Notes

Sort Sequence: ISO_NAME or ISO_NUM - user selected

Called from popup SWIP813

Columns display title and database column name

<u>Report Data</u>	<u>Element Name</u>	<u>SWITS Database Data</u>	<u>Element Name</u>
--------------------	---------------------	----------------------------	---------------------

Isotope Num	ISO_NUM
Isotope Name	ISO_NAME
Isotope Unit	ISO_UNIT
Half-life	ISO_HALFLIFE
Daughter Isotope	ISO_DTR_ISO
Daughter Factor	ISO_DTRPRD_FACTR
MFP Factor	ISO_MFP_FACTR
MAP Factor	ISO_MAP_FACTR
MAP Name	ISO_MAP_NAME
Conv. Factor	ISO_CONV_FACTR
Class A Limit	ISO_CLASS_A_LIM
Class B Limit	ISO_CLASS_B_LIM
Class C Limit	ISO_CLASS_C_LIM
Category 1 Limit	ISO_CLASS_1_LIM
Category 3 Limit	ISO_CLASS_3_LIM
Concentration Limit	ISO_CONSTR_LIM
Enriched	ISO_ENRICH
A2 Limit	ISO_A2_LIM
LFMW Limit	ISO_LFMW_LIM
DE-Ci Conv. Factor	ISO_DE_CI_FACTR

Business users: FULL READ ONLY

SWIR401 Waste Types Maintenance Screen

Description

Report that lists of all elements in the Primary Waste Type Table

Notes

Sort Sequence: PWTYP_CD

Display title and columns

Report Data SWITS Database

Element Name	Data Element Name
Primary Waste Type Code	PWTYP_CD
Waste Type Description	PWTYP_DESCR
Hazardous	PWTYP_HAZ
Ship Time	PWTYP_SHIP_TIME
Rad	PWTYP_RAD

Business users: FULL READ ONLY

SWIR402 Secondary Waste Type Code Table Screen

Description

A report that lists of all elements in the Secondary Waste Type Table

Notes

Sort Sequence:	SWTYP_CD
Report Data	SWITS Database
Element Name	Data Element Name
Secondary Waste Type Code	SWTYP_CD
Secondary Waste Group	SWTYP_GROUP
Secondary Waste Type Description	SWTYP_DESCR

Business users: FULL READ ONLY

SWIR403 Company Table Screen

Description

Report SWIR403 presents a list of all elements in the Company Table.

Notes

Sort Sequence: CMPNY_ID ASC
Selection: n/a
Schedule: As requested

Business users: FULL READ ONLY

SWIR404 Generator Table Screen

Description

Report SWIR404 presents a list of all elements in the Generator Table.

Notes

Sort Sequence: substr(PERS_NAME,4,16) ASC (last name since all names are of the format FM Name.)
Selection: n/a
Schedule: As requested

Business users: FULL READ ONLY

SWIR405 Facility Table Screen

Description

Lists all of the elements in the Facility Table.

Notes

Sort Sequence: FACIL_AREA, FACIL_ID
Selection: n/a
Schedule: n/a
Frequency: As requested (Monthly)
Volume: 50 pages

Totals: none
Page Break: none
Requestor/Org Name: Dan McCann, WMP
Special Form/Font: hpstd
Report Distribution: 1 Copy - Internal Use Only

Business users: FULL READ ONLY

SWIR406 Container Type Table Screen

Description

Report SWIR406 presents a list of all elements in the Container Type Table. A sample report layout is shown in Figure 7-85.

Notes

Selection: All records from the file are reported.

Special processing: Select * from contype order by cntyp_cd.

Sort Sequence: Sorted in ascending sequence by 'cntyp_cd'.

Schedule: As requested.

Other Comments:

Business users: FULL READ ONLY

SWIR407 Packaging Components Table Screen

Description

A list of all elements in the Packaging Table

Notes

Sort Sequence: PDESC_DESCR

Report Data Element Name SWITS Database Data Element Name

Component Description PDESC_DESCR

List of Values Flag PDESC_LOV

Business users: FULL READ ONLY

SWIR408 Storage Category Table Screen

No Text

Business users: FULL READ ONLY

SWIR409 Miscellaneous Codes TableScreen

Description

Report SWIR409 presents a list of all elements in the Miscellaneous Code Table.

Notes

Selection: Select all (*) from codecheck

Sort Sequence: Sorted in ascending sequence by 'code_field_name'.

Schedule: As requested.

Business users: FULL READ ONLY

SWIR410 Charge Code and Forecast Table Screen

Description

Report SWIR410 presents a list of all elements in the Charge Code and Forecast Table.

Notes

User Selection: Fiscal Year (YYYY format), Optional

Sort Sequence: Fiscal Year, Company ID, Charge Code, Primary Waste Type, Secondary Waste Type Group, Generator Group

Schedule: As requested.

Business users: FULL READ ONLY

SWIR411 Container Size Description Table Screen

Description

List of defined container sizes

Notes

Selection: Select all (should be all of the field names) (*) from consize

Special processing:

Sort Sequence: Sorted in ascending sequence by 1, 2.

Schedule: As requested.

Other Comments:

Business users: FULL READ ONLY

SWIR412 Facility Unit Table Screen

Description

Report on the defined Facilities and their Units

Business users: FULL READ ONLY

SWIR415 Person Table Screen

Description

Report SWIR415 presents a list all elements in the Person Table.

Notes

Sort Sequence: SUBSTR(PERS_NAME,4,16), SUBSTR(PERS_NAME,1,3) ASC (last name, first initials)

Selection: n/a

Schedule: As requested

Business users: FULL READ ONLY

SWIR416 Generator Group Table Screen

Description

Report SWIR416 presents a list of all elements in the Generator Group Table.

Notes

Selection: GGRP_ID like user specified Generator Group ID (defaults to all Group ID?s - SWIP830 logic (now form SWIR416))

Special Processing: select PERS_NAME from GENGROUP, PERSON where GGRP_PERS_ID = PERS_ID

Sort Sequence: GGRP_NUM, ASC GGRP_ID ASC

Schedule: As requested

(Generator Group Descriptions for Comments, Dates, and Yes/No are what's displayed on the SWIU101 Generator-Specific Data Screen for that particular Group ID)

Business users: FULL READ ONLY

SWIR417 Source Organization Table Screen

Description

Report SWIR417 presents a list of all elements in the Source Organization Table.

Notes

Sort Sequence: ORG_GGRP_ID ASC, ORG_SOURCE ASC

Schedule: As requested

Business users: FULL READ ONLY

SWIR418 DOT Container Spec Table Screen

Description

Report SWIR418 list of all elements in the DOT Container Specification Table.

Notes

Selection: Select all (should be all of the field names) (*) from dotspec

Sort Sequence: Sorted in ascending sequence by 1

Schedule: As requested.

Other Comments:

Business users: FULL READ ONLY

SWIR419 DW Number Table Screen

Description

Reports on the contents of the Dangerous Waste Number table, with toxic characteristic (TC) limits for liquid wastes.

Business users: FULL READ ONLY

SWIR420 Waste Components and Properties Report Screen

Description

Describes one or more selected waste components with detailed information about DW number associations, reactivity, compatibility, solvent, and underlying hazardous constituent properties.

Notes

Report on the contents of the HAZCOMP table, sorted by component number or description. The sort order to use is passed in as an argument from the P420 pop-up screen.

Business users: FULL READ ONLY

SWIR426 Waste Stream Table Screen

Description

The Waste Stream Table report lists records in the waste stream table. Depending on the selection made by the user, the list displayed may be a subset of the entire set of waste streams.

Notes

Sort Sequence: If user chooses ALL: STRM_CD

Otherwise: STRM_DESIG_CD, STREAM_NAME

User Selection: Type of waste streams - Haz, Mixed or All (based on first character of STRM_CD),
Generated Onsite, Offsite or both (based on STRM_SRCE_LOCN)

Data Selects: STRM_NAME not like >*% =

Schedule: n/a

Frequency: as needed

Volume: 1-10 pages

Totals: n/a

Page Break: as needed

Requestor/Org Name: Darlene Hagel

Special Form/Font: hplsc

Report Distribution:

Programmer Note: The popup data selection form SWIP883 creates an ORDER BY clause.

Business users: FULL READ ONLY

SWIR427 Nonconformance Code Table Screen

Description

Master list of nonconformance codes and their details.

Notes

The requirements for Nonconformance verifications are more complicated than currently supported in SWITS. Mark Ellefson (SWEA) is the probable contact for more information.

Business users: FULL READ ONLY

SWIR428 DW Subcategory Table Screen

Description

Displays the contents of the Dangerous Waste Subcategory Table

Business users: FULL READ ONLY

SWIR429 Spent Solvent Table Screen

Description

Lists the contents of the Spent Solvents look up table

Business users: FULL READ ONLY

SWIR430 Certification Statement (LDR) Table Screen

Description

Displays the contents of the CERT STATEMENT table.

Business users: FULL READ ONLY

SWIR431 Waste Specification Record Report Screen

Description

Previously Report SWIR609

Displays waste specification records and indicates the latest revision number and dates for each.

Notes

Previously Report SWIR609

Sort Sequence: WSRD_NUM

Data Selects: All records in WSRD table.

Business users: FULL READ ONLY

SWIR432 WA Toxicity Report Screen

Description

List of the Washington State Toxicity Characteristic and Conversion Factors

Business users: FULL READ ONLY

SWIR433 Waste Reactivities Listing Screen

Description

List of Reactivity Codes and Definitions that may be applied to a Waste Component exhibiting the D003 characteristic.

Business users: FULL READ ONLY

SWIR434 Waste Compatibility Reference Listing Screen

Description

Displays the master list of waste compatibilities that may be associated with a waste component.

Business users: FULL READ ONLY

SWIR435 Waste Treatments Listing Screen

Description

Master list of Waste Treatment Types.

Business users: FULL READ ONLY

SWIR505 Alert Flag Tracking Screen

Description

Produces a report of all containers identified for corrective action during a TSD inspection.

Business users: FULL READ ONLY

SWIR522 Purchase Order Table Screen

Description

Report SWIR522 lists all elements in the Purchase Order table.

Business users: CONTAINER MANAGEMENT, FULL READ ONLY

SWIR525 Container Management Reporting Screen

Description

This report provides general Container Management Program (CMP) information with several methods of selection. The data can be selected by any combination of the following: purchase order, purchase order release number, purchase order item and/or received into CMP date range. Those containers that qualify are listed in container ID order. This ad-hoc type of reporting is based upon the S520 CMP and is intended to serve as a hardcopy version of the S520 data.

Business users: CONTAINER MANAGEMENT, FULL READ ONLY

SWIR550 CMP Barcode Labels Screen

Description

Prints unique 7 character Container Identification Number (CIN) barcode labels to be placed on new waste containers. The report output is in a proprietary format (ZPL or ZPL II) for use with the Zebra 105 and 105 SE series barcode printers.

Notes

Replaces SWITS report SWIR550.

Large print jobs (over 40 labels) were quitting early due to software handshake problems causing a buffer overflow at the printer. The client-server implementation has improved, but not eliminated the problem. SWS reports that up to 90 labels can be printed before the print job fails, vs. 40 earlier.

While not absolute requirements, the CIN label text was expanded to fill the entire label, and support for the Zebra 105 SE printer was added during the report redesign. The first change makes labels easier to read, while the second ensures that labels will print correctly if the printer is changed.

Simple Rule

Report provides Site Warehouse Services (SWS) with the ability to print new container CIN labels on demand to either a Zebra 105 or 105 SE thermal printer. Run time parameters include a starting and ending CIN # range, printer model & print destination (Printer / File / Screen).

SWS is not the sole source of CIN Labels: A recent conversation with Larry Cole of Waste Management Northwest revealed that the Transportation Logistics (TL) group produces a small number of Package Labels for wooden boxes built on-site + unlabeled containers from inventories other than SWS. As of March 1999, the TL group was not connected to HLAN or using SWITS, resulting in some duplicate package ID's. We are working to get the TL group to use the client-server software to fix this problem.

Business users: CONTAINER MANAGEMENT, FULL READ ONLY

SWIR551 SWITS Barcode Labels Screen**Description**

Prints Barcode labels from the WASTE table, based on location or package ID criteria passed in from the pop-up form.

Notes

Replaces the functionality of SWITS reports SWIR 551 (Barcode Labels by Facility) and SWIR 554 (Barcode Labels by Portfolio)

Customer requested that label text be centered based on label length. The non-visual nature of coding in ZPL / ZPL II requires a manual trial & error process to design the appropriate label formats. As of March '99, all report changes must be made from the field, as the SWITS development group does not have access to a barcode printer.

The Zebra 105 SE printers require top-quality barcode label stock and thermal ribbons to work properly. As of March '99, the PIN label report (R551) had to be slowed down to 2" / sec print speed on the 105SE to accommodate poor quality stock installed on the T-Plant printer. Bad Label Stock is identified by faint labels which can't be resolved by increasing the printer burn temperature. Bad thermal ribbon disintegrates when the burn temp. is raised, producing a circular white pattern through the barcode. In both cases the label is unreadable.

Simple Rule

Prints one or more PIN labels from 7 to 14 characters in length. Labels are automatically centered and scaled to use the full label, based on the user-specified printer model and label length determined at run-time.

Labels can be printed by location (Facility ID, Quadrant, Module, Tier Level, Tier Position), Request or Portfolio #, or singly, by specific PIN #.

Business users: FULL READ ONLY

SWIR552 Facility or Location Barcode Label Screen**Description**

Report is used to print both Facility and inter-facility location labels.

Notes

Replaces two existing SWITS reports, SWIR 551 and SWIR 552. The location detail entries for MODULE, TIER LEVEL, TIER POSITION or LOCN GEN DETAIL are not validated against the database.

Simple Rule

Produces a single Facility or Facility Location (Facility Quadrant, Unit, Module, Tier Level, Tier Position) label based on user input.

Business users: FULL READ ONLY

SWIR558 CMP Receive to Warehouse Report Screen**Description**

Report confirming the receipt or failure to receive of empty containers into the Warehouse inventory. Reasons why a container might not be received include : (1) an unknown CIN# or (2) the package has already been received into inventory.

SWIR570 TSD Receive/Relocate (to Detailed Location) Report Screen**Description**

Reports TSD container receive and relocate activities at a "detailed" facility location. Detailed facility location refers to the Facility ID, Quadrant, Module, Unit, Tier Level and Tier Position. The primary uses for this function / report are to move existing TSD containers within a facility, or to accept TSD wastes into a building for more permanent storage following their post-shipment inspection at a TSD staging pad.

Notes

TSD detailed location container receive and relocate report, launched from the "process_barscan_rec" UNIX process only when TSD Receive/Relocate (to Location) type records are processed.

This report has four sections:

- (1) Packages accepted, updated, or successfully moved at a TSD facility.
- (2) Packages scanned which failed the Receive / Relocate process.
- (3) A list of packages and detailed locations within the scanned facilit(ies) where 2 or more packages share the same location.
- (4) Containers that failed to process, because 2 or more containers were assigned to the same location in the scanner.

SWIR574 TSD Detailed Location Inventory Report Screen

Description

Detailed Location Inventory Report, shared by TSD and Process Facilities.

Notes

TSD detailed facility location report, launched from the "process_barscan_recs" UNIX process when TSD facility location or Process facility location records are processed. To save paper, only exceptions are reported; containers where the scanned and SWITS locations agree are excluded.

The report has 4 sections:

- (1) the scanned and current SWITS locations for a package do not match; details are displayed on the report with the package ID.
- (2) The scanned package was not found in SWITS. Likely causes include scanning an empty container that has not been accepted into SWITS as a WASTE record, or the scanned full package is being tracked under a different number.
- (3) Packages found in SWITS for the facility, but not scanned. The operator must determine whether the package was missed when checking the inventory.
- (4) Duplicate Locations: 2 or more containers are listed for the same detailed location (MODULE, TIER LEVEL, POSITION) in SWITS

SWIR577 Generator Barcode Facility Inventory Report Screen

Description

Report used for inventory management at a generator facility and/or storage pad. The typical use will be to scan all of the containers at a physical facility, then generate this report for a list of exceptions to the data contained in SWITS.

Notes

Generator inventory report, launched from the "process_barscan_recs" UNIX process only when Generator Inventory type records are processed. The report has 4 sections:

The first displays containers where the scanned location agrees with that in SWITS.

Section #2 displays packages where the scanner and SWITS disagree: The scanned and SWITS location fields are displayed, with details about the package size, etc. included to aid in identification.

Section #3 shows packages scanned that do not appear in SWITS.

The last section displays packages that exist for the facility location scanned in SWITS, but were not scanned.

SWIR579 TSD Overpack Report Screen

Description

Report detailing the outcome of Overpacking (single container placed inside of a larger container), either for storage (permanent) or shipping (temporary overpack).

Notes

Report detailing the outcome of Overpacking (single container placed inside of a larger container), either for storage (permanent) or shipping (temporary overpack).

SWIR611 Performance Evaluation Summary Screen

Description

Summarizes the verification performance of a given company and/or generator group for a specified time period, using the audit categories and codes from the Nonconformance table. See Form U427.

Business users: FULL READ ONLY

SWIR617 Verification Activities Screen

No Text

Business users: TSD REPRESENTATIVE, VERIFICATION

SWIR626 Weekly Open Requests and Est. Comp. Date Screen

No Text

Business users: FULL READ ONLY

SWIR627 Label Verification Report Screen

No Text

Business users: FULL READ ONLY

SWIR628 Final Backlog Waste Designation Screen

No Text

Business users: FULL READ ONLY

SWIR700 Report Usage Log Screen**Description**

Details the report use activity for a date range, user and / or specific report.

Business users: FULL READ ONLY

SWIR701 Report Usage Summary Screen**Description**

Displays the date and number of times a user has run a particular report.

Business users: FULL READ ONLY

SWIR705 System Bulletin Report Screen**Description**

Displays the complete text of a system bulletin message for the input date.

Business users: FULL READ ONLY

SWIR706 SCR Summary Report - by Status Screen**Description**

The SCR Summary Report (SWIR706) lists open SCRs classified by their current status. SCRs that have been completed or canceled are not shown.

Business users: SWITS ADMINISTRATION

SWIR707 Open SCR Summary Report - by SCR Number Screen**Description**

Displays the SCR number and description for unfinished SCR's.

Business users: SWITS ADMINISTRATION

SWIR710 Open DCR Summary Report - by DCR Number Screen**Description**

Reports the DCR number and description for "open" data change requests.

Business users: SWITS ADMINISTRATION

SWIR711 DCR Listing Screen**Description**

Prints the details of one or more Data Change Request (DCR) records that match an input DCR Number or DCR Number pattern (using a wildcard).

Business users: SWITS ADMINISTRATION

Business users: SWITS ADMINISTRATION

3.1.13 MAINTAIN DATABASE

3.1.13.1 Database Access

The database administrator will have the ability to:

- Add users to the SWITS
- Delete users from the SWITS
- Modify user access permissions within SWITS
- Check the history of persons who logged on, logged off, and who unsuccessfully tried to log on to the database
- Check the database for data integrity
- Provide a list of authorized users.

The HP-UX™ system administrator will have the ability to:

- Check the system for unauthorized programs and viruses
- Check the history of persons who logged on, logged off, and who unsuccessfully tried to log on to the system
- Monitor the network activity
- Make network configuration changes.

Access to the system will be limited to authorized users. To prevent unauthorized access to this system and its data the system will authenticate the user with the domain; the user access privileges are maintained within the SWITS server.

A user will be a member of a group within SWITS. Each group will have its own permissions to use and see certain data and to perform limited functions. Each member of a group will have the same permissions as other members of the group.

3.1.14 ARCHIVE DATA

Must support the RIDS for the SWITS system. The data within SWITS are not archived but maintained in the database. The transaction log is archived to tape periodically.

Data archives sent to the Records Holding Area will meet their requirements for media and format.

3.2 PERFORMANCE REQUIREMENTS

No response time requirements have been defined for the SWITS system. The customer wants a quick, responsive system but no benchmark configuration of transaction, client computer, network, and server have been established.

3.2.1 AVAILABILITY

SWITS will be on-line and available from 6:00 AM to 5:00 PM on weekdays (minimum).

3.3 DESIGN CONSTRAINTS

3.3.1 NUMBER OF USERS SUPPORTED

The SWITS will allow at least:

- 64 SWITS client connections
- 30 SWITS users to connect and work concurrently
- 300 different login identifiers, e.g. 300 users each with their own unique identifier
- 20 different user groups with different data access privileges

3.3.2 DATA STORAGE CAPACITY

Storage requirements for SWITS data are:

- Provide on-line storage for solid waste data generated since the start of operations at Hanford.

The volume of data stored as of December, 1999, is about 300 MB. Additional space is required for indexes to the data.

3.3.3 STANDARDS COMPLIANCE

3.3.3.1 DATABASE ELEMENT NAMING STANDARDS

SWITS will follow the Hanford Site Protocol Standard for Data Naming Convention.

3.3.3.2 DATABASE MANAGEMENT

SWITS will use the database software and computer hardware as directed by the Hanford CIO Office.

3.3.3.3 USER INTERFACE

SWITS will follow the Oracle forms standards in a MS Windows environment.

3.3.4 HARDWARE LIMITATIONS

The user interface shall run on the site-standard personal computers. As of February, 2000, these computers run MS Windows 95, 98, or NT on a Pentium-class machine.

3.3.5 SOFTWARE LIMITATIONS

For the PC the following software is available for use during development:

- MS-Windows™*
- Oracle™ Database
- Oracle™ Developer CASE tool
- Oracle™ Designer CASE tool

In addition to the availability of use, SWITS is limited by the software license agreements.

3.4 ATTRIBUTES

3.4.1 MAINTAINABILITY

The SWITS will be installed on commercially-available hardware installed in office environments. No special maintenance requirements have been identified.

3.5 OTHER REQUIREMENTS

3.5.1 DATA DICTIONARY

Table 4 lists the objects defined in SWITS.

Table 5 and Table 6 list the relationships between the SWITS objects that must be maintained by SWITS.

3.5.1.1 SWITS OBJECTS and their Attributes

Table 4. SWITS Objects and their Data Elements

The name of the table is in **bold** followed by a brief description.

The name of the column is in caps followed by the data type and length if applicable. The domain name is added if it applies. Certain temporary tables for the PNNL data interface and the bar code scanner are not included.

AUDITPARMS

Description : This table contains the names of tables and columns for which delete, insert, and update transactions will be logged.

AUD_COLUMN VARCHAR2(30)

* trademark of Microsoft Corporation

CC_FORECAST_VOL NUMBER 10

The volume of waste forecasted by a specific generator that will be charged against a charge code for a specific year.

CC_FY_CD VARCHAR2(4)

The Fiscal Year in which this charge code is valid.

CC_GROUP VARCHAR2(30)

Allows for identifying charge codes by groups. Examples are Expense Programs, Submarines, etc.

CC_ID NUMBER 8

CC_LOV VARCHAR2(1) DOMAIN: YESNO

Flag used to determine what will be displayed in a list of values pop-up. Valid entries are 'Y' for yes (active) or 'N' for no (inactive). If the flag is set to 'Y', the value will be displayed in the LOV pop-up.

CC_RAD_CD VARCHAR2(4)

For RAD waste, indicates the "group". Possible values are USG (Unsegregated), TRU (Transuranic) and LLW (Low-Level Waste).

CC_RAD_DISP_CD VARCHAR2(1)

Required for RAD waste charge codes, this field specifies the final disposition of waste using this code. Valid values are 'S' = 'Storage' or 'D' = 'Disposal'.

CC_SPO_NUM VARCHAR2(17)

The number from a form (Sponsor Order Number or Memorandum Purchase Order) that is used to assign a charge code to an offsite waste generator.

CC_SPO_NUM VARCHAR2(17)

Values entered in FY 1999 and FY 2000 (?) charge code records are not Sponsor Order Numbers. Values for FY 1999 and FY 2000 are charge code COA values and need to be moved to new charge code COA, if this field is added. Values entered prior to FY 1999 are presumed to be valid Sponsor Order Numbers.

CC_SUM_CNTRL_FLAG VARCHAR2(1)

Optional flag indicating that the charge code should be totaled separately on the billing report. The business rules specify that some (higher rate) charge codes are used for special projects (bulk waste etc.), and need to be detailed separately from other charges.

CC_TSCA_FLAG VARCHAR2(1) DOMAIN: YESNO

Says whether TSCA regs apply to the waste.

CINVENTORY

Description : This table identifies information that is used in support of the Container Management Program (CMP). The table provides Container ID numbers (CINs) to be used on new containers that are procured for use as waste containers. The containers are associated to the Purchase Order they were purchased on, the Hanford Store Order the generator ordered them on, and to the current owner.

CIN_PKG_ID VARCHAR2(7)

The unique Container Identification Number (CIN) that will be assigned to each container that is part of the Container Management Program. The number is assigned by Site Warehousing Services or by Generator Services and is used for tracking a new container throughout its life cycle. The CIN will eventually become the CON_PKG_ID (PIN) in the WASTE record.

CIN_PKG_ID VARCHAR2(7)

SWIS520 Container Management Program. Required. Must be of the form yynnnnn where yy represents the current year and nnnnn represents a serial number. Provide a restricted list of values to automatically generate the next available CIN_PKG_ID.

CIN_PO_SRC_ID VARCHAR2(10)

Identifies the source id number (aka batch or lot number) of a blanket Purchase Order/Item number that the container was order and received from.

CIN_PO_SRC_ID VARCHAR2(10)

New field added per SCR 1138.

CIN_REC_DT DATE

Date containers are received into the CMP.

CIN_REC_DT DATE

SWIS520 Container Management Program. If entered. Must be current date or before.

CODECHECK

Description : Occurrences of this entity contain the name of a data element and a specific valid value that may be stored in the data element of the same name in the functional database. A data element with 1-9 valid values will have a corresponding number of occurrences within this table to provide database maintenance software with a reference of those valid values. Data elements with greater than 9 valid values may have a separate validation table where desirable.

CODE_DESCR VARCHAR2(70)

A description of the code and its purpose.

CODE_FIELD_NAME VARCHAR2(24)

The name of a data field as specified in the data dictionary for which a code validation edit is required.

CODE_VALUE VARCHAR2(12)

A valid value for the data field being tested.

COMPANY

Description : The table identifies all companies involved with the generation, transportation, or disposition of waste tracked by the SWITS system. The data in this table should come from the Hanford People Core company file, therefore our company id should match that id.

CMPNY_CITY VARCHAR2(15)

City in which the company resides.

CMPNY_EPA_ID VARCHAR2(12)

Unique identification number assigned by the EPA to a company.

CMPNY_ID VARCHAR2(4)

Identifies the company which generates, transports, treats, stores, or disposes of the waste. Typical codes are WHC, KEH, PNL, etc.

CMPNY_LOCATION VARCHAR2(3)

Code to describe the company as on-site (ON) or off-site (OFF).

CMPNY_LOCATION VARCHAR2(3)

LOV from miscellaneous Code Table field name 'LOCATION'

CMPNY_LOV VARCHAR2(1) DOMAIN: YESNO

Flag used to determine what will be displayed in a list of values pop-up. Valid entries are 'Y' for yes (active) or 'N' for no (inactive). If the flag is set to 'Y', the value will be displayed in the LOV pop-up.

CMPNY_PCORE_ID VARCHAR2(5)

CMPNY_PHONE VARCHAR2(12)

Phone number for the official point of contact for the organization specified by the company ID and company type code.

CMPNY_STREET VARCHAR2(36)

Street address for the company.

CMPNY_TITLE VARCHAR2(60)

The name of a company.

CMPNY_TYPE VARCHAR2(3)

Additional identifier for the company performing solid waste activities. Company Types include:

TRA Transportation Company
GEN Generator
TSD TSD

CMPNY_TYPE VARCHAR2(3)

LOV from miscellaneous code table using 'CMPNY_TYPE'

CMPNY_ZIP_CD VARCHAR2(10)

The zip code for the area in which the company resides.

COMPATIBILITY

Description : Reference table describing the waste compatibility properties for a chemical or generic waste component. Valid values are similar to those used by SWOP for the "Storage Category", i.e. Oxidizer, Acid, etc. This table is maintained as part of the designation process, though its values are not referenced until the waste component(s) associated with the compatibility records are applied to a waste package.

COMPAT_CD VARCHAR2

Compatibility code, to be defined by Technical Services group

COMPAT_DESCR VARCHAR2

Compatibility description, to be supplied by the Tech. Services group.

COMPAT_LOV VARCHAR2(1) DOMAIN: YESNO

'Y' indicates that the compatibility code is available through lists of values, 'N' = not displayed.

CONSIZE

Description : This table holds all the valid size descriptions for the various container types, such as "55 Gallon" for drums.

CSZ_BILL_VOL NUMBER 10

Volume for which the generator will be billed for a container.

CSZ_DESCR VARCHAR2(14)

Describes the size of the container. To be in the format Length X Width X Height.

CSZ_LOV VARCHAR2(1) DOMAIN: YESNO

Flag used to determine what will be displayed in a list of values pop-up. Valid entries are 'Y' for yes (active) or 'N' for no (inactive). If the flag is set to 'Y', the value will be displayed in the LOV pop-up.

CSZ_UNIT VARCHAR2(1)

Contains a code for the unit used in the size description, if appropriate. Some descriptions are mixed units or include an indication of units, in which case this field is null.

CSZ_VOL NUMBER 10

Provides the volume of a certain container type.

CONTYPE

Description : All containers fall into one of several specific types. This entity identifies all valid container types.

CNTYP_CD VARCHAR2(2)

Code which identifies the type of container per Department of Transportation (DOT) and other requirements. Codes include DM for metal drums, barrels, etc.

CNTYP_DESCR VARCHAR2(42)

The DOT or other specifications describing a waste container. Specification includes self contained, plywood box, metal box, etc.

CNTYP_LOV VARCHAR2(1) DOMAIN: YESNO

No text.

DCR

Description : This table is used to track pending and completed data change requests.

DCR_ASGN_DT DATE

The date the DCR was assigned to someone to be performed.

DCR_ASGN_NAME VARCHAR2(20)

The name of the person to whom the DCR was assigned.

DCR_CAT VARCHAR2(10)

The category assigned to the DCR.

DCR_CHGTYP_CD VARCHAR2(1)

A code for the type of data change, global or local, required by the DCR.

DCR_CMPLT_DT DATE

The date on which the DCR was completed.

DCR_COMMENTS VARCHAR2(2000) DOMAIN: COMMENTS

Comments about the DCR, usually made by the person performing the change.

DCR_DESCR VARCHAR2(255)

The description of the change required by the DCR.

DCR_ESTIMATE NUMBER 4

The estimate in hours to perform the DCR.

DCR_JUSTIF VARCHAR2(255)

The justification for performing the change defined in the DCR.

DCR_NUM NUMBER 8

The identification number for the DCR.

DCR_PKG_ID VARCHAR2(14)

The package ID affected by the DCR, if it applies to a specific package.

DCR_REQ_DT DATE

The date on which the data change request is made.

DCR_SCR_NUM NUMBER 8

The number of a related SCR.

DCR_STATUS VARCHAR2(12)

The current status of the DCR.

DCR_SUBMIT_NAME VARCHAR2(20)

The name of the person submitting the DCR.

DCR_SUBMIT_PHONE VARCHAR2(12)

The submitter's phone number.

DCR_TESTER_NAME VARCHAR2(20)

The person's name who tested the data change.

DCR_TEST_DT DATE

The date on which the data change was tested.

DECAYISO

Description : This entity identifies the decay values for a specific isotope based on a specific decay value date. It is filled as part of the report 328 process and used there.

DVI_DECAY NUMBER 38

The fraction of a known (measured) isotope which remains after decay through STS_DECAY_DT.

DVI_DT DATE

The date FROM which decay is calculated, corresponding to DVM_DT.

DVI_ISO_NUM NUMBER 3

Code arbitrarily assigned for Solid Waste to identify a specific isotope or entity reported as an isotope, such as mixed fission products.

DECAYMIX

Description : This table identifies the date used to compute radioactive decay values for isotopes associated with containers tracked by the system. It is filled as part of the report 328 process and used there.

DVM_DT DATE

The date FROM which decay is calculated; roughly corresponds to CON_TSD_ACCEPT_DT.

DVM_FACTRDK_CS137A NUMBER 38

The fraction of a nominally undecayed unknown, from an onsite source of Mixed Activation Products, which is assumed to be Cs-137. This factor accounts for the decay which would have taken place between the time the unknown was generated and when the overall radioactivity of the container was measured.

DVM_FACTRDK_CS137F NUMBER 38

The fraction of a nominally undecayed unknown, from an onsite source of Mixed Fission Products, which is assumed to be Cs-137. This factor accounts for the decay which would have taken place between the time the unknown was generated and when the overall radioactivity of the container was measured.

DVM_FACTRDK_RU106 NUMBER 38

The fraction of a nominally undecayed unknown, from an onsite source of Mixed Fission Products, which is assumed to be Ru-106. This factor accounts for the decay which would have taken place between the time the unknown was generated and when the overall radioactivity of the container was measured.

DVM_FACTRDK_SR90 NUMBER 38

The fraction of a nominally undecayed unknown, from an onsite source of Mixed Fission Products, which is assumed to be Sr-90. This factor accounts for the decay which would have taken place between the time the unknown was generated and when the overall radioactivity of the container was measured.

DVM_OFFSITE_CS137A NUMBER 38

The fraction of an unknown, from an offsite source of Mixed Activation Products, which is assumed to be Cs-137 after decay through STS_DECAY_DT.

DVM_OFFSITE_CS137F NUMBER 38

The fraction of an unknown, from an offsite source of Mixed Fission Products, which is assumed to be Cs-137 after decay through STS_DECAY_DT

DVM_OFFSITE_MAP NUMBER 38

The fraction of an unknown, from an offsite source of Mixed Activation Products, which remains after decay through STS_DECAY_DT.

DVM_OFFSITE_MFP NUMBER 38

The fraction of an unknown, from an offsite source of Mixed Fission Products, which remains after decay through STS_DECAY_DT.

DVM_OFFSITE_RU106 NUMBER 38

The fraction of an unknown, from an offsite source of Mixed Fission Products, which is assumed to be Ru-106 after decay through STS_DECAY_DT.

DVM_OFFSITE_SR90 NUMBER 38

The fraction of an unknown, from an offsite source of Mixed Fission Products, which is assumed to be Sr-90 after decay through STS_DECAY_DT.

DVM_ONSITE_CS137A .NUMBER 38

The fraction of an unknown, from an onsite source of Mixed Activation Products, which is assumed to be Cs-137 after decay through STS_DECAY_DT.

DVM_ONSITE_CS137F NUMBER 38

The fraction of an unknown, from an onsite source of Mixed Fission Products, which is assumed to be Cs-137 after decay through STS_DECAY_DT.

DVM_ONSITE_MAP NUMBER 38

The fraction of an unknown, from an onsite source of Mixed Activation Products, which remains after decay through STS_DECAY_DT.

DVM_ONSITE_MFP NUMBER 38

The fraction of an unknown, from an onsite source of Mixed Fission Products, which remains after decay through STS_DECAY_DT.

DVM_ONSITE_RU106 NUMBER 38

The fraction of an unknown, from an onsite source of Mixed Fission Products, which is assumed to be Ru-106 after decay through STS_DECAY_DT.

DVM_ONSITE_SR90 NUMBER 38

The fraction of an unknown, from an onsite source of Mixed Fission Products, which is assumed to be Sr-90 after decay through STS_DECAY_DT.

DESIGNATION

Description : Input table used to store the global characteristics of a waste to be designated. Wastes may be designated that are "out side" of SWITS, then later associated with one or more SWITS package ID's.

DES_APPRV_BY CHAR
designation approver

DES_APPRV_COMMENTS VARCHAR2(2000) DOMAIN: COMMENTS
Additional comments about a designation

DES_APPRV_DT DATE
date the designation was approved for application to one or more waste packages.

DES_DEBRIS_FLAG CHAR 1

Debris flag, values are 'Y' or 'N'. Debris is solid material over 60 mm particle size that is not covered by a specific LDR treatment standard. It is checked when preparing the designation, and appears on the LDR certification letter.

DES_DENSITY NUMBER

Waste density, if known.

DES_DESIGNATOR CHAR

Person creating the designation

DES_DESIGNATOR_COMMENTS VARCHAR2(2000) DOMAIN: COMMENTS

Optional designation comments.

DES_ENTRY_DT DATE

Date that the designation header record was created.

DES_EXPIRE_DT DATE

DES_FLASHPOINT VARCHAR2(6)

Flashpoint, if known. Per Mark 6/28/99, value should be 'N/A' if not applicable

DES_GENER_WASTE_DESCR VARCHAR2

Description of the waste.

DES_GENER_WASTE_DESCR VARCHAR2

will the description be carried over to the package waste description?

DES_ID CHAR

Unique identifier for the Designation Record.

DES_PH NUMBER

pH of the waste, if known.

DES_PHYS_STATE_CD CHAR

Physical state of the waste. Valid values are 'S' for 'Solid' or 'L' for 'Liquid'. The user will make a manual determination for mixtures, sludges, etc.

DES_UHC_APPL CHAR 1

Indicates the presence of Underlying Hazardous Constituents for a waste designation. Valid values are 'P' = Present, 'A' = Absent, and 'N' = Not applicable.

If 'N', don't ask UHC questions when performing the designation

DES_UHC_DETERM CHAR 1

Documents the basis of the UHC determination (UHC's apply / don't apply) on the LDR certification letter. Possible values are "Generator Knowledge", "by Analysis" or "Both"

DES_WASTEWATER_FLAG CHAR 1

Indicates whether the waste source is a wastewater. Wastewater means a waste containing < 1% total organic carbons (TOC) and < 1% suspended solids. Valid values are 'Y', 'N'.

Impact: the reportable limits for underlying hazardous constituents (UHC's) change based on the wastewater determination.

DES_WASTE_STATUS VARCHAR2

Field used to determine the applicability of the listed waste codes (U/P codes). Values are OLD, SPILLED, and USED.

DOTSPEC

Description : This table holds Department of Transportation specifications for container types, such as 17C.

DOT_DESCR VARCHAR2(60)

Text description of a DOT specification entered by WMP when a DOT specification becomes associated with SWITS.

DOT_LOV VARCHAR2(1) DOMAIN: YESNO

DOT_SPEC VARCHAR2(3)

Unique identification of a DOT specification entered by WMP when a DOT specification becomes associated with SWITS.

DWNUM

Description : Master list of the Dangerous Waste numbers used to designate / regulate wastes.

DW_DESCR VARCHAR2(2000)

Text description for a Dangerous Waste Number.

DW_LOV VARCHAR2(1) DOMAIN: YESNO

DW_NUM VARCHAR2(4)

Unique identifier for a Dangerous Waste Number.

DW_RPT_LIMIT NUMBER 10

TCLP or Liquid concentration limits for DW codes D004 - D043, expressed in Mg/L

ENCASEMENT

Description : This is a more general form of High Integrity Container (HIC). The user may stabilize waste by treatment or putting in aHIC or otherwise sealing the waste away from the environment. They needed a term more general than HIC.

ENCMNT_BEG_COORD_N VARCHAR2(6)

Identifies the beginning north coordinate assigned to a specific location used to store or dispose of solid waste. The Hanford coordinate system is used.

ENCMNT_BEG_COORD_W VARCHAR2(6)

Identifies the beginning west coordinate assigned to a specific location used to store or dispose of solid waste. The Hanford coordinate system is used.

ENCMNT_DESCR VARCHAR2(240)

ENCMNT_END_COORD_N VARCHAR2(6)

Identifies the ending north coordinate assigned to a specific location used to store or dispose of solid waste. The Hanford coordinate system is used.

ENCMNT_END_COORD_W VARCHAR2(6)

Identifies the ending west coordinate assigned to a specific location used to store or dispose of solid waste. The Hanford coordinate system is used.

ENCMNT_ID CHAR 14

FACILITY

Description : Each facility on the Hanford site is identified by this entity.

FACIL_AREA VARCHAR2(6)

The approved name of the areas identified on the Hanford site used for the storage or disposal of waste; area names include 200E, 200W, etc.

FACIL_BAR_ID VARCHAR2(5)

The approved machine readable code (MRC) assigned by the MRC Council to identify location within barcode labels.

FACIL_DE_CI_LIMIT NUMBER 7

Specifies the maximum Dose-Equivalent Sum permitted for a given facility and quadrant. Also called the LCO (Limit Condition of Operation) by the SWO Group.

FACIL_DE_CI_THRESHOLD NUMBER 7

Specifies the minimum Dose-Equivalent Sum for a given facility and quadrant below which a package is not counted in the sum at all.

FACIL_GEN_PROJ VARCHAR2(10)

Name or abbreviated name of the waste project for a generator facility. Generator Project is used to identify multiple facilities supporting one waste project. Supports grouping and reporting requirements of generator facilities similar to the TSD Facility Class for treatment, storage, and disposal facilities (reference TSDFACIL table).

FACIL_ID VARCHAR2(11)

The specific facility where waste is generated, received, or stored on the Hanford site.

FACIL_LOV VARCHAR2(1) DOMAIN: YESNO

Flag used to determine what will be displayed in a list of values pop-up. Valid entries are 'Y' for yes (active) or 'N' for no (inactive). If the flag is set to 'Y', the value will be displayed in the LOV pop-up.

FACIL_NAME VARCHAR2(55)

The proper name given to a facility which generates or receives waste for treatment, storage, or disposal.

FACIL_PE_CI_LIMIT NUMBER 7

Plutonium Equivalent Curie operating limit for the facility, or unit within a facility. The values stored here in the database are 90% those of the true working limit, to provide a cushion.

FACIL_PHONE VARCHAR2(12)

FACIL_SITE_PROJ VARCHAR2(4)

Site Project

FACIL_SITE_PROJ VARCHAR2(4)

New field added for SCR 1130. Valid responses (about 6 - 8 values) will be stored in the Miscellaneous Codes (CODECHECK) table.

FACIL_TSD_CLASS VARCHAR2(4)

FACIL_TSD_FLAG VARCHAR2(1) DOMAIN: YESNO

If the facil_type = TSD then CLASS is required

FACIL_TSD_MFST_ADDR VARCHAR2(40)

FACUNIT

Description : This entity describes the Units into which a Facility may be subdivided.

Notes : If the facility has curie limits entered then no curie limits may be entered for the facility unit.

UNIT_DESCR VARCHAR2(20)

Description or name for the unit. Examples: Floor Level 1, or Trench 12, or Caisson Alpha 1.

UNIT_DE_CI_LIMIT NUMBER 7

Specifies the maximum Dose-Equivalent Sum permitted for a given facility and quadrant. Also called the LCO (Limit Condition of Operation) by the SWO Group.

UNIT_DE_CI_THRESHOLD NUMBER 7

Specifies the minimum Dose-Equivalent Sum for a given facility and quadrant below which a package is not counted in the sum at all.

UNIT_HEIGHT NUMBER 3

Height of trench for Trench Inventory reporting.

UNIT_LOV VARCHAR2(1) DOMAIN: YESNO

The LOV flag is used to determine what will be displayed in a list of values pop-up. Valid entries are 'Y' for yes (active) or 'N' for no (inactive). If the flag is set to 'Y', the value will be displayed in the LOV pop-up.

UNIT_PE_CI_LIMIT NUMBER 7

Plutonium Equivalent Curie operating limit for the facility, or unit within a facility. The values stored here in the database are 90% those of the true working limit, to provide a cushion.

UNIT_RPT_GROUP VARCHAR2(3)

New field to allow grouping otherwise unrelated facility / unit combinations for reporting purposes. Requested by Robin Bushore for the purposes of grouping T-Plant RAD inventories. Field was left optional, as it might not apply to the CWC or Burial Grounds

UNIT_RSU VARCHAR2(1) DOMAIN: YESNO

Yes/No flag identifying whether a facility ID/unit is considered a retrievable storage unit.

UNIT_UNIT VARCHAR2(3)

Identifies a specific waste storage area by Solid Waste Operations in a facility or burial ground. If the facility is a building L01, L02, etc. is used for floor level. If the facility is a burial ground T01, T12, CA1, etc. is used for a trench or caisson.

UNIT_WIDTH NUMBER 3

Width of trench for Trench Inventory reporting.

GENERATOR

Description : Each certified waste generator person is represented in this table.

Notes : If a person has been marked once as a qualified shipper they are always a qualified shipper. The attribute gener_shipper may be able to be moved to the Person table.

GENER_ADD_DT DATE

Date the generator was added to the table.

GENER_END_DT DATE

Date the generator is no longer valid for new waste for the associated Gengroup.

GENER_END_DT DATE

This date needs to allow future dates.

GENER_SHIP_COORD_FLAG VARCHAR2(1) DOMAIN: YESNO

Is this person allowed to schedule shipments for this Generator Group.

GENGROUP

Description : Each certified waste generator person is a member of a generator group identified in this table. Waste and data ownership are established by Generator Group and not by individual Generator.

GGRP_ID VARCHAR2(8)

This is the identifier for a Generator Group, which is defined as a business grouping of generators. Some generator groups manage a specific facility/facilities or area, where others manage a conceptual area (e.g. DYNCORP). Each company may have one or more Generator Groups. This is used for data "ownership" of records; i.e. members of the same GGRP_ID may update data owned by the group.

GGRP_LOV VARCHAR2(1) DOMAIN: YESNO

The LOV flag is used to determine what will be displayed in a list of values pop-up. Valid entries are 'Y' for yes (active) or 'N' for no (inactive). If the flag is set to 'Y', the value will be displayed in the LOV pop-up.

GGRP_NAME VARCHAR2(40)

Name/Title of the Generator Group.

GPS

Description : Reverse Engineered from table GPS

GPS_COORD_N VARCHAR2(10)

Reverse Engineered from column GPS_COORD_N of table GPS

GPS_COORD_W VARCHAR2(10)

Reverse Engineered from column GPS_COORD_W of table GPS

GPS_DT DATE

Reverse Engineered from column GPS_DT of table GPS

GPS_ERR_CD VARCHAR2(10)

Reverse Engineered from column GPS_ERR_CD of table GPS

GPS_LOCN_FACIL_ID VARCHAR2(11)

Reverse Engineered from column GPS_LOCN_FACIL_ID of table GPS

GPS_LOCN_UNIT VARCHAR2(3)

Reverse Engineered from column GPS_LOCN_UNIT of table GPS

GPS_PKG_ID VARCHAR2(15)
Reverse Engineered from column GPS_PKG_ID of table GPS

GPS_UID NUMBER
Reverse Engineered from column GPS_UID of table GPS

ISOTOPE

Description : Each isotope that can be present in a waste container is represented by an occurrence of this entity.

Notes : ISO_CLASS_1_LIM is really a Category 1 limit so should be renamed ISO_CAT_1_LIM.
ISO_CLASS_3_LIM is really a Category 3 limit so should be renamed ISO_CAT_3_LIM.

Mark Ellefson wants to change the unit of measure of all isotopes to Curies instead of the current system where some are Curies and some are Grams. This will affect numerous calculations, which should not be a major problem, and will affect the EP-125 report, which has different reporting categories for the two different types of isotopes.

Requirements:

ISO_MAP_NAME and ISO_MAP_FACTR must both be either null or not null.

ISO_DTR_ISO and ISODTRPRD_FACTR must both be either null or not null.

ISO_10CFR6155_TABLE NUMBER 2
The number of the table into which the isotope falls in 10 CFR Section 61.55 for determining waste classification. Some are in Table 1, some are in Table 2, and most are in neither.

ISO_BULK_DISP_LIM NUMBER 38
Bulk disposal limit for this isotope.

ISO_CATEGORY_1_LIM NUMBER 38
Defines the upper limits for determining Category 1 radionuclides. Units are curies per cubic meter (ci/m3).

ISO_CATEGORY_1_LIM NUMBER 38
Value from HNF-EP-0063, Table A-2. Low-Level Burial Grounds Radiological Content Limits, "Category 1 waste limit (Ci/m3) " column.

ISO_CATEGORY_3_LIM NUMBER 38
Defines the upper limits for determining Category 3 radionuclides. Units are curies per cubic meter (ci/m3).

ISO_CATEGORY_3_LIM NUMBER 38

Value from HNF-EP-0063, Table A-2. Low-Level Burial Grounds Radiological Content Limits, "Category 3 waste limit (Ci/m3) " column.

ISO_COMBUST_LIM NUMBER 38

Defines Interim Safety Basis upper limits for Category 3, combustible, low-level waste. Units are curies per cubic meter (ci/m3).

ISO_COMBUST_LIM NUMBER 38

Value from HNF-EP-0063, Table A-2. Low-Level Burial Grounds Radiological Content Limits, "ISB Combustible waste limit (Ci/m3) " column.

ISO_CONV_FACTR NUMBER 38

Factor for converting grams of the specific isotope to curies (ci/g).

ISO_CONV_FACTR NUMBER 38

This value is from HNF-EP-0063, Table A-1. Conversion Factors for General Radiological Calculations, "Specific activity (curies pr gram)" column.

ISO_DE_CI_FACTR NUMBER 38

Dose Equivalence Factor for the given Isotope. This value is multiplied with the quantity of the isotope to get the dose equivalence sum for an isotope. The sum of all the isotopes in a package is stored in RDET_TOT_DE_CI.

ISO_DE_CI_FACTR NUMBER 38

The value is from HNF-EP-0063, Table A-1. Conversion Factors for General Radiological Calculations, "Dose equivalent curie correction factor" column.

ISO_DTRPRD_FACTR NUMBER 38

Factor for the parent/daughter radionuclide pairs showing the corresponding activity of the daughter product.

ISO_DTR_ISO NUMBER 3

The isotope number of any daughter product produced by radioactive decay.

ISO_DTR_ISO NUMBER 3

Used in some code to find the daughter of this isotope. For cases of secular equilibrium where some value must be calculated the half-life of the daughter is set to the half-life of the parent. (See the SQL code for details.)

ISO_FISSILE_FLAG CHAR 1

'Y' indicates that the Isotope is considered when calculating Fissile FGE quantities.

ISO_HALFLIFE NUMBER 38

Half-life of isotope in days, rate of decay.

ISO HALFLIFE NUMBER 38

The value is from HNF-EP-0063, Table A-1. Conversion Factors for General Radiological Calculations, Half-life (days) column.

ISO_LOV	VARCHAR2(1)	DOMAIN: YESNO
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The **LOV** flag is used to determine what will be displayed in a list of values pop-up. Valid entries are 'Y' for yes (active) or 'N' for no (inactive). If the flag is set to 'Y', the value will be displayed in the LOV pop-up.

ISO MAP FACTR NUMBER 38

The proportion of MAP (Mixed Activation Products, Isotope 19) which is assumed to consist of the specific isotope in question, if and only if, the source of the waste is 100 Area facilities with the exception of 108F facility or the waste source is identified in the company table as a generator of MAP instead of MFP.

ISO MAP NAME VARCHAR2(5)

Name given to specific isotope to be used if it has a non-zero value for MAP factor.

ISO MFP FACTR NUMBER 38

The proportion of MFP (Mixed Fission Products, Isotope 19) which is assumed to consist of the specific isotope in question.

ISO MOBILE RAD LIM NUMBER 38

The mobile radioactive isotope reporting limit for this isotope.

ISO MOBILE RAD LIM NUMBER 38

Value from HNF-EP-0063, Table A-2. Low-Level Burial Grounds Radiological Content Limits, "Mobile radionuclide reporting limit (Ci/m3)" column.

ISO NAME VARCHAR2(20)

Name of a specific isotope.

ISO NONCOMBUST LIM NUMBER 38

Defines Interim Safety Basis upper limits for Category 3, noncombustible, low-level waste. Units are curies per cubic meter (ci/m3).

ISO NONCOMBUST LIM NUMBER 38

Value from HNF-EP-0063, Table A-2. Low-Level Burial Grounds Radiological Content Limits, "ISB Non-combustible waste limit (Ci/m3)" column.

ISO NUM NUMBER 3

Code arbitrarily assigned for solid waste to identify a specific isotope or entity reported as an isotope, such as mixed fission products, CO-60, SR90, etc.

ISO_PE_CI_FACTR NUMBER 38

That number, which when multiplied by the quantity (in curies) of an isotope, yields the Plutonium equivalent curies for that isotope. Dimensionless.

ISO_PU_FGE_FACTR NUMBER 38

That number, which when multiplied by the quantity (in grams) of an isotope, yields the plutonium fissile gram equivalent for that isotope. Dimensionless.

ISO_PU_FGE_FACTR NUMBER 38

The value is from HNF-EP-0063, Table B-1, Plutonium-239 Fissile Gram Equivalent Correction Factors, "Correction factor" column.

ISO_TRUCONT VARCHAR2(1) DOMAIN: YESNO

A flag that indicates whether the isotope is a TRU contributor. Valid values are 'Y', 'N' or null.

ISO_UNIT VARCHAR2(2)

LOV =

```
select code_value, substr(code_descr, 1, 10)
  from codecheck
 where code_field_name = 'ISO_UNIT'
 order by 1
```

ISO_UNIT VARCHAR2(2)

Units by which amounts of a specific isotope are measured. Normally GM for grams or CI for curies.

ISO_WATTS NUMBER 38

The amount of heat generated by a radioactive isotope. Units are watts per curie.

ISO_WATTS NUMBER 38

The value is from HNF-EP-0063, Table A-1. Conversion Factors for General Radiological Calculations, "Heat of decay (watts per curie)" column.

LDRCERT

Description : Reference table of waste treatment certification codes and boilerplate text used in specifying LDR codes against a designated waste. While not related, the presence of a DW number and subcategory forces the choice of a waste treatment code.

CERT_CD VARCHAR2(2)

Land Disposal Restriction code, a.k.a. waste treatment code. The treatment code applied against a selected DW subcategory.

CERT_DESCR VARCHAR2(150)

Describes the certification code.

CERT_LOV VARCHAR2(1) DOMAIN: YESNO
Indicates whether the LDR code is available for display from list-of-values.

CERT_TEXT VARCHAR2(2000)
The full legal text describing the waste treatment. Used on current SWITS LDR notification reports.

MSDS

Description : Sub-entity of SOURCE, contains the attributes specific to an MSDS (Material Safety Data Sheet).

MSDS_MANUFACTURER VARCHAR2(100)
Manufacturer name

MSDS_NUM VARCHAR2(10)
Manufacturer provided number identifying an MSDS.

MSDS_PROD_NAME VARCHAR2(100)
Common manufacturer's product or trade name.

MSDS_PROD_USAGE VARCHAR2(255)
Manufacturer's text describing the intended product use.

NONCONCODE

Description : Codes for Nonconformance reporting.

NCC_ASSIGN VARCHAR2(1)
The type of reviewer who assigned the nonconformance to the waste package. May be E, O, T, R or V for Data Entry, Operations, Technical, Receipt, or Verification.

NCC_CD VARCHAR2(2)
The code describing the category of nonconformance.

NCC_DESCR VARCHAR2(60)
The description of the nonconformance code.

NCC_LOV VARCHAR2(1) DOMAIN: YESNO

PERSON

Description : This entity keeps track of all the persons associated with SWITS, whether they are users or not.

Should a complete address be required for all persons?

PERS_ACTIVE VARCHAR2(1)

PERS_CITY
City part of address.

VARCHAR2(15)

PERS_FIRST_NAME
Person's first name.

VARCHAR2(12)

PERS_HANFID

VARCHAR2(8)

The Hanford ID assigned to the person. May be different than PERS_ID if the record was created prior to the adoption of Hanford IDs.

PERS_ID

VARCHAR2(6)

The primary identifier for any person of interest to SWITS. This key will be used in other tables which have information for special subsets of individuals in the PERSON table (e.g. the GENERATOR table).

For onsite (Hanford) employees, this is the employee ID if used prior to the adoption of the Hanford ID. Hanford IDs are used for all entries of Hanford contractor employees created since the Hanford ID has been in use.

For offsite persons, an ID is created using the CMPNY_ID plus a number where LENGTH(CMPNY_ID) <= 3, the PERS_ID will be CIDNNN, and where LENGTH(CMPNY_ID) = 4, PERS_ID will be CIDNN, where CID = the CMPNY_ID and NN or NNN = 001/01 for the first entry from that company and then incremented as needed; e.g., the first PERS_ID entered for University of Washington (CMPNY_ID = UOW) would be UOW001.

PERS LAST NAME

VARCHAR2(20)

Format is two initials, a space, and the last name. If the person does not have a middle initial, a blank will be used in its place.

PERS LAST NAME

VARCHAR2(20)

Just a comment: I feel that names should not be entered this way, there very easily could be 2 people with the same first initial, middle initial and last name. Also this is not the standard way to keep names on Hanford site.

PERS MIDDLE INIT

VARCHAR2(1)

PERS MSIN

VARCHAR2(5)

MSIN (Mail Stop Identification Number) for onsite employee. NULL for offsite persons. Required for all persons with Onsite Company.

PERS PHONE

VARCHAR2(14)

Work phone number of person. Format is NNN NNN-NNNN; i.e., area code and full prefix are required.

PERS STREET

VARCHAR2(36)

Street part of address.

PERS_ZIP_CD VARCHAR2(10)
Zip Code part of address.

PROFILE

Description : The Waste Profile is the description of waste from similar generating processes from a given generating group.

Notes : When an LOV is displayed from profiles should only display most current, approved and not expired profiles.

Only one revision of a profile can be open at any point in time.

System needs to control that as soon as a new rev of the profile is approved that the previous rev becomes expired.

PROF_APPROVAL_DATE DATE
The date that the profile was approved.

PROF_CHEM_SCREEN VARCHAR2(1)
A flag that will be used to inform that the associated waste should have been chem screened.

PROF_COND_OF_APPROVAL VARCHAR2
The profile is approved with the conditions listed here.

PROF_CURR_VER_RATE NUMBER 3
The current verification rate for this profile.

May range from 0 to 100%.

PROF_EXPIRE_DATE DATE
The date that the profile will expire, e.g., not be assignable to a Stream or Waste.

PROF_ID INTEGER
Unique identifier for the profile.

PROF_NAME VARCHAR2

PROF_ON_OFF_SITE VARCHAR2(8)

PROF_REV_NO INTEGER
The revision number for the Profile.
The revision number should be automatically generated using the rules from the WSRd numbering scheme.

PROJ DETAIL

No Text.

PDET_NAME VARCHAR2(20)

PDET_NDA_COMMENTS	VARCHAR2(2000)	DOMAIN: COMMENTS
PDET_NDA_COMP_DT	DATE	
PDET_NDA_ID	VARCHAR2(15)	
PDET_NDA_REQ	VARCHAR2(1)	
PDET_NDA_RESULTS	VARCHAR2(30)	
PDET_NDE_COMMENTS	VARCHAR2(2000)	DOMAIN: COMMENTS
PDET_NDE_COMP_DT	DATE	
PDET_NDE_ID	VARCHAR2(15)	
PDET_NDE_REQ	VARCHAR2(1)	
PDET_NDE_RESULTS	VARCHAR2(30)	
PDET_NEW_WSRD	VARCHAR2(3)	
PDET_OLD_WSRD	VARCHAR2(3)	
PDET_OPN_COMMENTS	VARCHAR2(2000)	DOMAIN: COMMENTS
PDET_OPN_COMP_DT	DATE	
PDET_OPN_PURP	VARCHAR2(100)	
PDET_OPN_REPACK	VARCHAR2(255)	
PDET_OPN_REQ	VARCHAR2(1)	
PDET_PKG_ID	VARCHAR2(14)	
PDET_RES_COMP	VARCHAR2(1)	
PDET_RES_REQ	VARCHAR2(1)	
PDET_SAM_REQ	VARCHAR2(1)	
PDET_TRT_COMMENTS	VARCHAR2(2000)	DOMAIN: COMMENTS

PDET_TRT_COMP_DT	DATE
PDET_TRT_FACIL_ID	VARCHAR2(11)
PDET_TRT_REQ	VARCHAR2(1)
PDET_TRT_TYPE	VARCHAR2(15)

PROJECT

No Text

PROJ_DESCR	VARCHAR2(255)
PROJ_NAME	VARCHAR2(20)

PURORDER

Description : This entity describes the purchase order with which the container was obtained.

Notes : 8/31/99 - DLM Added new attribute PO_REL_NUM (unique identifier). Existing data in SWITS should be converted with 00 loaded in release number. Release number 00 signifies a blanket purchase order - which is the current way of capturing PO information for CINVENTORY packages. In the new SWITS/CMP, the packages will be related to the (blanket) PO release and item number of that release. Total items on a PO release and their relationship back to the item numbers of the blanket PO (original) vary with each release.

9/2/99 - DLM Changed PURORDER foreign key relationships with CONTYPE and CONSIZE from 'may be' to 'must be'. Verified that all PURORDER data in current system will satisfy the relationship change. Relationship to DOTSPEC remains 'may be'. Usually the containers purchased through CMP will have a DOTSPEC but not always.

PO_DESCR	VARCHAR2(255)
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Description of an item ordered on a Purchase Order or specified on a Hanford fabrication document.

PO_DESCR	VARCHAR2(255)
----------	---------------

SWIS522 Purchase Order Information. Foreign key to Dotspec Table, if entered. A list of values pop-up display will be available on this field.

PO_ITEM_NUM	NUMBER	2
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Identifies the specific line number on a Purchase Order.

If the PO_NUM is a Hanford fabrication document number, the PO_ITEM_NUM will be 1.

PO_ITEM_NUM	NUMBER	2
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SWIS522 Purchase Order Information. Required.

PO_NUM	VARCHAR2(7)
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A unique number assigned to each Purchase Order or a Hanford fabrication document. The Purchase Order is used to order items from an offsite vendor and a Hanford fabrication document is used to have containers fabricated at an onsite fabrication shop.

PO_NUM VARCHAR2(7)
SWIS522 Purchase Order Information. Required.

PO_REL_NUM NUMBER 2

PO_TARE_WGT NUMBER 10
The weight of an empty waste container. This tare weight may include any shielding material required.

PO_TARE_WGT NUMBER 10
SWIS522 Purchase Order Information.

RADBILL

Description : Radioactive billing records

RB_BILL_FLAG VARCHAR2(1)

RB_BILL_VOL NUMBER 10

RB_COMMENT VARCHAR2(2000) DOMAIN: COMMENTS

RB_CONTROL_CD VARCHAR2(5)

RB_DNGR_FLAG VARCHAR2(1) DOMAIN: YESNO
'Y' indicates that the waste is regulated under RCRA or WDOE (WAC 173), meaning it is hazardous or, as Darlene Hagel prefers, "Dangerous" waste..

RB_GGRP_ID VARCHAR2(8)

RB_HANDLING VARCHAR2(1)

RB_RAD_CD VARCHAR2(3)
If not null, indicates the RAD waste secondary waste type. Valid values are "LLW" for Low Level Waste, "TRU" for Transuranic Waste, and "USG" for Unsegregated, NULL = Not radioactive. USG is not applicable to new items; included for legacy wastes only.

RB_RAD_DISP_CD VARCHAR2(1)

RB_SRCE_CHRG_CD VARCHAR2(8)

RB_SRCE_CMPNY_ID VARCHAR2(4)

RB_SRCE_CMPNY_TYPE	VARCHAR2(3)	
RB_STAB_REQD_FLAG	VARCHAR2(1)	DOMAIN: YESNO
RB_TSCA_FLAG	VARCHAR2(1)	DOMAIN: YESNO
'Y' indicates that the waste is regulated under TSCA. Usually applies to PCB wastes.		
RB_TSD_ACCEPT_DT	DATE	
RB_WASTE_CAT	VARCHAR2(5)	

REACTIVITY

Description : Reference table containing details about Dangerous Waste Characteristic Codes D001 - D003.

REACT_CD	VARCHAR2
Reactivity Code, to be defined by Tech. Services	
REACT_DESCR	VARCHAR2
Reactivity description, to be defined by the Technical Services group.	

REACT_LOV	CHAR
'Y' indicates that the reactivity is available through lists of values, 'N' = not displayed.	

REGCLOCK

Description : Based on the combination of waste types this entity will supply the number of days that should be added to the Accumulation Date in the waste record to determine the Shipment Deadline date.

RC_CERCLA_FLAG	VARCHAR2(1)
Yes means that CERCLA regulations apply.	

No means that they don't apply.

Null means that it has not been determined if the regulations apply.

RC_DAYS_TO_DEADLINE	NUMBER	3
RC_DNGR_FLAG	VARCHAR2(1)	DOMAIN: YESNO
RC_ID	NUMBER	5
The unique ID for this line.		
RC_RAD_CD	VARCHAR2(4)	
RC_TSCA_FLAG	VARCHAR2(1)	DOMAIN: YESNO

RELOCHIST

Description : Table used to track the movement of RAD wastes, once they have been accepted by a TSD.

RELOC_DT**DATE**

Date a container or package of waste is moved from one storage or disposal facility to another or moved within one of these facilities. This date applies to the movement of waste after it has been received by solid waste operations.

RELOC_FROM_FACIL_ID**VARCHAR2(11)**

Identifies the TSD facility that waste is being moved out of. The ID number is the site approved number such as 2401W.

RELOC_FROM_UNIT**VARCHAR2(3)**

Identifies the subdivision of the TSD facility that waste is being moved out of.

REVIEW NOTE

No Text.

RN_COMMENTS**VARCHAR2(2000)****DOMAIN: COMMENTS****RN_ID****NUMBER 5****RN_PRINT_FLAG****VARCHAR2(1)****DOMAIN: YESNO****RN_REVIEW_DT****DATE****REVIEW NOTE CODES**

No Text.

RNC_REVIEW_CD**VARCHAR2(40)****SCR**

Description : This table is used to track the status and disposition of SCR's for the SWITS application and database.

SCR_ACTN_APPRV**VARCHAR2(20)**

The name of the person approving the work after completion, usually the submitter of the SCR.

SCR_ACTN_APPRV_DT**DATE**

The date the work performed on the SCR was approved.

SCR_ACTN_ASGN**VARCHAR2(20)**

The name of the developer to whom the SCR was assigned.

SCR_ACTN_ASGN_DT DATE

The date SCR was assigned to a developer.

SCR_ACTN_CMPLT VARCHAR2(20)

The name of the developer who completed the SCR work and performed the unit testing.

SCR_ACTN_CMPLT_DT DATE

The date when the SCR work was completed and unit tested by the developer.

SCR_ACTN_DOC VARCHAR2(20)

The name of the person documenting the work performed for the SCR, usually the developer.

SCR_ACTN_DOC_DT DATE

The date when documentation of the work on the SCR was completed.

SCR_ACTN_OSB VARCHAR2(20)

The name of the person reviewing the SCR task and approving it under the Operations Safety Basis.

SCR_ACTN_OSB_DT DATE

The date on which the OSB review was completed.

SCR_ACTN_RLS VARCHAR2(5)

The SWITS software release in which the change defined by an SCR will be put into production.

SCR_ACTN_RLS_DT DATE

The date on which the system changes defined by the SCR were released to production.

SCR_BD_CMTS VARCHAR2(255)

Comments made during board consideration of the SCR.

SCR_BD_DEC VARCHAR2(1)

The Change Control Board's decision to accept, modify, reject or defer the SCR.

SCR_DESCR VARCHAR2(255)

Description of the change requested by the SCR.

SCR_DEVL_CMTS VARCHAR2(255)

Comments made by the developer regarding the work performed on the SCR.

SCR_EST NUMBER 4

The developer's or project manager's estimate of the hours required to complete the SCR.

SCR_ESTACPT_NAME VARCHAR2(20)

The person's name who accepted the estimate, usually the submitter.

SCR_EST_NAME VARCHAR2(20)

The name of the person developing the estimate for the SCR work.

SCR_IMP_CONTENT VARCHAR2(1)

A flag indicating whether the SCR has an impact on database content.

SCR_IMP_DMS VARCHAR2(1)

A flag indicating whether the SCR has an impact on the WRAP DMS.

SCR_IMP_OSB VARCHAR2(1)

A flag indicating whether the SCR has an impact on the Operations Safety Basis.

SCR_IMP_OTHER VARCHAR2(1)

A flag indicating whether the SCR has other impact. This impact should be described in the developer comments and in writing on the SCR.

SCR_IMP_REPORTS VARCHAR2(1)

A flag indicating whether the SCR has an impact on SWITS reports.

SCR_IMP_SCHEMA VARCHAR2(1)

A flag indicating whether the SCR has an impact on the database schema.

SCR_IMP_SCREENSHOTS VARCHAR2(1)

A flag indicating whether the SCR has an impact on SWITS screens.

SCR_IMP_SDD VARCHAR2(1)

A flag indicating whether the SCR has an impact on the SWITS System Design Description document.

SCR_IMP_SRS VARCHAR2(1)

A flag indicating whether the SCR has an impact on the SWITS System Requirements Specification.

SCR_JUSTIF VARCHAR2(255)

The submitter's justification for the change to SWITS.

SCR_MODULES VARCHAR2(80)

The developer's list of software modules, tables, and other entities to be affected by the SCR.

SCR_NEED_DT DATE

The date when the submitter wants the changes to be complete and released.

SCR_NUM NUMBER 8

SCR number.

SCR_POC_NAME VARCHAR2(20)

The point-of-contact for the SCR, generally the same person who will also test and approve the changes.

SCR_POC_PHONE VARCHAR2(12)

The point-of-contact's phone number.

SCR_REFSCR NUMBER 8

A reference SCR that has some relationship to the current SCR record. This will often indicate the SCR under which the original estimate was done, or which defined other related changes.

SCR_REQ_DT DATE

The request date of the SCR.

SCR_STATUS VARCHAR2(12)

The SCR's current status.

SCR_SUBMIT_NAME VARCHAR2(20)

The name of person submitting the SCR.

SCR_TPCN VARCHAR2(8)

The work order or TCPN to which the developer will the time required to complete the SCR.

SECWASTYPE

SWTYP_CD VARCHAR2(2)

Secondary waste type codes are a further breakdown of the SWTYP_GROUP.

SWTYP_DESCR VARCHAR2(50)

Description identifying the type of waste in a particular container or waste stream. The types are low-level, transuranic, unsegregated classified, industrial, special case, etc.

SWTYP_RAD_CD VARCHAR2(3)

Used for grouping data on some reports. Groups are Low-Level, Transuranic, Unsegregated, and High Level.

SHIP TRANSP

Description : This entity will be used to identify the companies that are associated with a shipment multiple of them will be transporters and we need to keep track of which transporter they are, like number 1, number 2.

Notes : This entity was added on 8-3-99 due to the result of meetings on shipping where it turns out that there could be 4 companies involved in the transportation of one shipment.

There could be off site companies.

SHPTRP_NUM NUMBER 2

SHIPMENT

Description : Each shipment of waste containers is tracked and defined by this entity.

Notes : 8-3-99 In the redesign of SWITS shipping module it was decided that instead of using an RSR and all of the other documents that are going to use a Bill of Lading (BOL). The BOL will be use the same fields as any other waste that is being shipped via SWITS.

SHPMNT_CERT_DT, SHPMNT_SHIP_DT, SHPMNT_ARRIVAL_DT, SHPMNT_TSD_ACCEPT_DT, and SHPMNT_MFST_RET_DT must be in chronological order as listed in this sentence. No date may be greater than the current date or less than the prior listed date. No date may be entered if any prior listed date has been left blank.

SHPMNT_ARRIVAL_DT DATE
Date the shipment arrives at its destination.

SHPMNT_CERT_DT DATE
Date that a qualified generator certifies that the contents of the waste shipment are fully and accurately described, packaged, marked, labeled, and are in all respects in proper condition for transport by highway according to all applicable regulations.

SHPMNT_COMMENT VARCHAR2(2000) DOMAIN: COMMENTS
On shipments need to have a comments field that the TSD can use to define special equipment needed. Cindy Stratman, 11/4/99.

SHPMNT_COST_EST NUMBER 9
Estimated cost of transportation and disposal.

SHPMNT_INVOICE VARCHAR2(10)
Invoice number from the disposal company.

SHPMNT_MFST_NUM VARCHAR2(10)
A unique identifier for a uniform hazardous waste manifest form consisting of a five-digit number. The manifest is used for hazardous waste, radioactive mixed waste, and PCB contaminated waste. For the purpose of recording movement of radioactive waste, where no manifest is used, the RSR number will be used instead.

8-3-99 when no manifest is needed a bill of lading will be used in this table the bill of lading number will be placed into this attribute which is the identifier for shipping documents

SHPMNT_MFST_NUM is the unique identifier for all shipments and will be used for shipping all waste that is tracked and reported on within SWITS.

SHPMNT_MFST_NUM VARCHAR2(10)
When the shipment type is bill of lading the shpmnt_mfst_num will be a system generated number. When viewed it should have BOL placed as a prefix.

SHPMNT_MFST_RET_DT **DATE**

Date the original manifest is returned to the Generator.

SHPMNT_MFST_TYPE_CD **VARCHAR2(3)**

Code which identifies whether or not a uniform hazardous waste manifest has been generated for onsite or offsite shipping of hazardous, mixed, or PCB waste. O for Onsite or F for Offsite.

SHPMNT_MFST_TYPE_CD **VARCHAR2(3)**

Validate this LOV from code check table using MFST_TYPE_CD.

SHPMNT_PO_NUM **VARCHAR2(8)**

Unique identifier for a Purchase Order.

SHPMNT_REQ_NUM **VARCHAR2(5)**

Unique identifier for a request received. This is often the WSDR number.

SHPMNT_REQ_NUM **VARCHAR2(5)**

??? This is how it previously worked. Should it still be here? Used to be as follows:

Required for manifest types ON and REF, optional for Manifest Type OFF, not allowed for Manifest Type TSD. If present, it indicates that the manifest is an Initial Manifest, meaning the first shipment of the waste from the generator.

SHPMNT_RSR_TYPE **VARCHAR2(2)**

Identifies the source and destination of waste being shipped on an RSR. GT - generator to TSD; TG - TSD to generator; TT - TSD to TSD.

SHPMNT_SCHED_DT **DATE**

Shipping date scheduled for the shipment.

SHPMNT_SHIP_DT **DATE**

The date the shipment starts moving.

SHPMNT_TSD_ACCEPT_DT **DATE**

Date the shipment is accepted at a TSD facility.

SOLVENT

Description : A table of hazardous component which are considered to be spent solvents.

SLV_LOV **VARCHAR2(1)**

Indicates that the record is or is not available for list-of-values displays and data validation processes.

SLV_SORT_ABBREV **VARCHAR2(12)**

An abbreviation of the name used for sorting purposes. For example, "Butyl alcohol" for "n-Butyl alcohol" to sort it with the B's.

SOURCE

Description : A master table containing all of the batched "sources" of chemical mixtures that may be associated with a designation record.

SRC_DESCR	VARCHAR2(250)
Chemical Source Description Text	

SRC_EFFECTIVE_DT	DATE
Effective date of the waste source. Current procedures dictate that CAS Sources be reviewed every 6 months.	

SRC_EXPIRE_DT	DATE
Date after which the source is not to be used. Per Mark, the expiration will be enforced through business rules, not the application.	

SRC_FLASHPOINT NUMBER 6
Flashpoint of the chemical source, if known. This value affects the determination of the dangerous waste characteristic D001.

SRC_ID	NUMBER	8
Chemical Source Identification Number		

SRC_NOTES	VARCHAR2(255)
Additional notes text related to the chemical source.	

SRC_PH	NUMBER	3
pH of the waste source, if known. This value affects the determination of the corrosivity characteristic D002.		

SRC_PHYS_STATE_CD	VARCHAR2(3)
Physical state of the waste source (Liquid / Solid), if known. Knowledge of the physical state may affect the applicability of both state and federal Toxicity Characteristics.	

STATE

Description : This table identifies all states involved with the generation, transportation, or disposition of waste tracked by the SWITS system.

STATE_CD	VARCHAR2(2)
Standard state abbreviation code.	

STATE_NAME	VARCHAR2(15)
Name of the state.	

STORAGECAT

Description : Each waste container is assigned a specific storage category that groups the types of waste stored within the container. This entity identifies each possible category.

SCAT_CATEGORY VARCHAR2(20)

Describes the storage category of the waste container. Each container will have only one category assigned. Categories include acid, caustic, flammable, other mixed waste (OMW), PCBs, etc.

SCAT_CD VARCHAR2(3)

Arbitrary code assigned by WMP to identify storage categories.

SCAT_LOV VARCHAR2(1) DOMAIN: YESNO

Must be answered Yes, No or Not Applicable

SCAT_RAD_DISP_CD VARCHAR2(1)

Radioactive waste disposition code - valid values are 'S' - Storage and 'D' - Disposal. Used in determining base billing rate for radioactive waste.

SCAT_STAB_REQD_FLAG VARCHAR2(1) DOMAIN: YESNO

Stabilization required flag.

STREAM

Description : This entity identifies all waste stream categories utilized by WDOE for tracking waste in the Annual Dangerous Waste Report (ADWR).

STRM_ACTIVITIES VARCHAR2(16)

Contains up to four groups of codes of three characters each describing the Waste Minimization activities implemented for the waste stream.

STRM_ACTIVITIES VARCHAR2(16)

Enterable and updatable only if STRM_WASTE_MIN = 'Y'

Three character codes separated by single spaces

Should this field have some type of validation???

STRM_CD VARCHAR2(4)

Key identifier for a waste stream. The field format is X999, where X describes the waste type. For example, a mixed waste code would start with 'M', a hazardous stream with 'H', etc. The CON_STRM field in the WASTE table references this field for its list of values.

STRM_COMMENTS VARCHAR2(2000) DOMAIN: COMMENTS

Comments field relating to Waste Stream.

STRM_DESCR**VARCHAR2(70)**

Description of the waste stream.

STRM_DESIG_CD**VARCHAR2(3)**

Valid values are shared with the HDET_DESIG_CD field and are contained in the CODECHECK table under the field name DESIG_CD.

STRM_EPA_CD**VARCHAR2(100)**

Holds string of four-character EPA Dangerous Waste Numbers. Valid values are stored in the DWNUM table. Field is a foreign key to HDET_DW_NUM in the HAZDETAIL table.

STRM_FORM_CD**VARCHAR2(4)**

Washington State code describing the form of the waste in the stream.

STRM_GENER_TREAT**VARCHAR2(2)**

Valid values are Y = Yes, N = No, and DK = Don't Know.

STRM_GENER_TREAT**VARCHAR2(2)**

LOV codecheck table using 'STRM_MGT_CD'

if STRMJ_MANAGE_LOCN = 'OFF' then this field must be NULL.

STRM_INCREASE**VARCHAR2(1)****DOMAIN: YESNO**

Enterable and updatable only if STRM_WASTE_MIN = 'Y'.

STRM_LOV**CHAR**

Flag indicating whether value is valid for input through Forms. 'Y' = 'Yes', 'N' = 'No'

STRM_MANAGE_LOCN**VARCHAR2(3)**

Valid values are OFF = Offsite, ON = Onsite.

STRM_MANAGE_LOCN**VARCHAR2(3)**

LOV codecheck table using 'LOCATION'

STRM_NAME**VARCHAR2(70)**

Name of the waste stream.

STRM_ORIGIN_CD**VARCHAR2(3)**

List of values contained in CODECHECK table under field name ORIGIN_CD.

STRM_ORIGIN_CD**VARCHAR2(3)**

LOV codecheck table using 'STRM_ORIGIN_CD'

STRM_PERMIT**VARCHAR2(2)**

Valid values are Y = Yes, N = No, and DK = Don't Know.

STRM_PERMIT VARCHAR2(2)

LOV codecheck table using 'STRM_MGT_CD'

Forced NULL and not enterable if STRM_MANAGE_LOCN = 'OFF'

STRM_RECYCLED NUMBER 12

The percentage of waste in the waste stream recycled by the receiving facility.

STRM_RECYCLED NUMBER 12

May be entered only if STRM_WASTE_MIN = 'Y'

STRM_REDUCE_QTY VARCHAR2(12)

Amount of source reduction or 'NA' for 'Not Applicable'

STRM_REDUCE_QTY VARCHAR2(12)

May be entered only if STRM_WASTE_MIN = 'Y'

STRM_RESIDUAL_CD VARCHAR2(4)

Only entered if the Origin Code = 'v'.

STRM_RESIDUAL_CD VARCHAR2(4)

Enterable only if STRMJ_ORIGIN_CK = 'v'

STRM_SRCE_CD VARCHAR2(3)

Washington State code for the type of activity that created the waste in the waste stream.

STRM_SRCE_LOCN VARCHAR2(3)

Indicates whether waste stream was generated onsite or offsite. Valid values are OFF = Offsite, ON = Onsite.

STRM_SRCE_LOCN VARCHAR2(3)

LOV codecheck table using 'LOCATION'

STRM_SYSTEM_CD VARCHAR2(4)

Washington State code for the system used for waste management of the waste in the waste stream.

STRM_WASTE_MIN VARCHAR2(1) DOMAIN: YESNO

Valid values are Y = Yes, N = No.

STRM_WDOE_CD VARCHAR2(50)

Valid values contained in the DWNUM table. Format is four character codes separated by a space.

STRM_WDOE_CD VARCHAR2(50)

Consists of four-character codes separated by single spaces

Flag indicating whether treatment code is available for use through forms ('Y' = 'Yes', 'N' = 'No')

TRLOG

Description : This table contains the transaction log records for inserts, updates, and deletes performed on selected tables and fields.

TR_COLUMN VARCHAR2(30)

The name of the column changed. This field is defined for update transactions only.

TR_FUNCTION VARCHAR2(1)

A code for the type of change transaction, 'D' for record delete, 'I' for record insert, and 'U' for record update.

TR_KEY1 VARCHAR2(50)

The first key field of the record changed.

TR_KEY2 VARCHAR2(50)

The second key field, if it exists, of the record changed.

TR_KEY3 VARCHAR2(50)

The third key field, if it exists, of the record changed.

TR_KEY4 VARCHAR2(50)

The fourth key field, if it exists, of the record changed.

TR_KEY5 VARCHAR2(50)

The fifth key field, if it exists, of the record changed.

TR_KEY6 VARCHAR2(50)

The sixth key field, if it exists, of the record changed.

TR_NEW VARCHAR2(255)

The new value in the column after being updated. This field is defined for update transactions only.

TR_OLD VARCHAR2(255)

The old value in the column before being updated. This field is defined for update transactions only.

TR_TABLE VARCHAR2(30)

The table in which the logged change took place.

TR_TIME DATE

The system date and time when the logged change took place.

TR_USERID VARCHAR2(8)

The SWITS user id of the operator performing the change to be logged.

TRLOGARCH

Description : The contents of the TRLOG table are occasionally archived and stored in this table. TRLOG is used for auditing data changes.

TA_COLUMN	VARCHAR2(30)
TA_FUNCTION	VARCHAR2(1)
TA_KEY1	VARCHAR2(50)
TA_KEY2	VARCHAR2(50)
TA_KEY3	VARCHAR2(50)
TA_KEY4	VARCHAR2(50)
TA_KEY5	VARCHAR2(50)
TA_KEY6	VARCHAR2(50)
TA_NEW	VARCHAR2(255)
TA_OLD	VARCHAR2(255)
TA_TABLE	VARCHAR2(30)
TA_TIME	DATE
TA_USERID	VARCHAR2(8)

UHC

Description : Lookup table which identifies one or more constituents (CAS#'s) as underlying hazardous constituents of another (by CAS#).

UHC_NWW_LIMIT	NUMBER
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Regulatory limit for Non-Waste Water Streams.

UHC_WW_LIMIT	NUMBER
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Waste Water Limit, in mg/L

UPLDWASTE

Description : Temporary table used to load Waste Package information from an Engineering database (in Paradox) into SWITS.

UWST_ACCUM_DT	DATE
UWST_DESIG_CD	VARCHAR2(3)
UWST_GENER_WASTE_DESCR	VARCHAR2(255)
UWST_PHYS_STATE_CD	VARCHAR2(3)
UWST_PKG_ID	VARCHAR2(14)
UWST_PROCESS_FLAG	VARCHAR2(1)
UWST_REQ_NUM	VARCHAR2(5)
UWST_SEC_PKG_ID	VARCHAR2(14)
UWST_SRCE_CMPNY_ID	VARCHAR2(4)
UWST_SYSTEM_ID	VARCHAR2(4)
UWST_USERID	VARCHAR2(8)
UWST_WASTE_STREAM	VARCHAR2(4)
UWST_WASTE_WGT	NUMBER 12
UWST_XFR_TIME	DATE

VERIFICATION

Description : The master record holding summary information about verifications performed in SWITS. The detailed inspection records are in the WASTE_VERIFICATION table.

A verification record may apply to 0-many Waste records.

A waste record may have 0-many Verification records.

A verification record may be entered into SWITS before the corresponding waste package(s) is(are) entered.

Notes : VER_METHOD removed, moved to WASTE_VRIFICATION table.

VER_DT renamed to VER_COMPLETE_DATE.

VER_FAIL_REASON renamed to VER_RESULTS_COMMENT.

VER_PASS renamed to VER_VERIF_STATUS.

VER_CMPLT_DT	DATE
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The date on which all verifications were completed. This date appears in the report as the date when the container was verified.

VER_ID	INTEGER
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VER_RESULT_COMMENTS **VARCHAR2(2000)** **DOMAIN: COMMENTS**
Comments on the waste package verification. May include notes about why the package failed verification.

VER_VERIF_STATUS **CHAR**
Expected to have the value of:

Null - no verification performed yet
Pass without discrepancy
Pass with discrepancies
Fail
Hold

WA TOXICITY

Description : Reference table containing the WA State toxicity categories ('X','A','B','C','D') and toxic conversion factor (1,10,100,1000,10000) to be used in calculating EC (Equivalent Concentration) percentages for "Unlisted" (no U/P code) dangerous wastes.

WAT_TOX_CAT_CD **CHAR**
Code used for determining WA State Toxicity Criteria. Valid values are 'X','A','B','C','D'

WAT_TOX_FACTOR **CHAR**
Factor (1,10,100,1000,10000) multiplied against the quantity of a WA State regulated CAS# to determine the Equivalent Concentration (EC) percent.

WASTE

Description : Master table containing references to all containerized waste packages tracked in SWITS. Loose waste streams are referenced in the UNCONTAIN table.

Notes : When the relationship to a Generator Group changes then we need to look at the generator specific data that is associated with both the old generator group and the new generator group. Possibly display a message saying that generator specific data exists ask or tell that it will be deleted. Look into database level triggers to enforce this situation.

The Waste record has 3 states associated with it.

1) Type of Owner - can have values for Generators, TSP Rep, or TSD Ops. The actions that can be performed on the WASTE record are limited depending on the group that controls the record. Value of the current owner type is stored in the CON_CONTROL column. Details are in the Waste Record Control tab of the Excel spreadsheet "SWITS State-Transition Diagrams" located in SWITSUPD.

2) Container Usage - can have values of Available or In Use. A container that is Available can be assigned by any Generator to his/her own Generator Group. A container In Use locks the value of the Generator Group that owns the container. Value is stored in the CON_AVAILABLE column. Details are in the Container Usage tab of the Excel spreadsheet "SWITS State-Transition Diagrams" located in

SWITSUPD.

3.) Content Code - can have values for Empty, Not Empty, or Repackaged. This state interacts with Container Usage; when a container goes Not Empty it also sets the In Use flag (that is, when you put something in the container that generator group owns the container and doesn't transfer ownership). When the waste is repackaged the Content Code is set to Repackaged and you can't do anything more to the record. Value stored in the CON_CONTENT_CODE column. Details are in the Content Code tab of the Excel spreadsheet "SWITS State-Transition Diagrams" located in SWITSUPD.

The Waste record also can have 4 kinds of regulations applied to it in any combination.

- CON_CERCLA_FLAG shows whether CERCLA regs apply (Y) or not (N).
- CON_DANG_FLAG shows whether dangerous regs (RCRA, WDOE) apply (Y) or not (N).
- CON_RAD_CD shows whether the waste is LLW, TRU, or not radioactive.
- CON_TSCA_FLAG shows whether the waste has PCBs (Y) or not (N).

The combination of the regulations that apply determines the length of time on the regulatory clock, the attributes shown to the customer, and the waste edits that will be performed before shipment.

CON_ACCUM_DT DATE

Accumulation date, the date the waste was accumulated. This date is the beginning of the storage time limit identified in the Primary Waste Type table. This field is also used as the general date of waste generation for all waste types.

CON_AVAILABLE_FLAG VARCHAR2(1) DOMAIN: YESNO

Attribute defining whether the waste container is available for use or re-assignment. 'N' - No, container is in current or planned use. 'Y' - container is available.

CON_CERCLA_FLAG VARCHAR2(1) DOMAIN: YESNO

Indicates if the waste is regulated under CERCLA. This regulation applies to wastes originating from former "Superfund" sites, prior to 1979.

CON_CNTR_VOL NUMBER 10

Total volume for a specific container. Default units are cubic meters.

CON_COA VARCHAR2(4)

CON_CONTENT_CD CHAR

Attribute detailing whether the container appears on inventory reports. If empty or repackaged, the container is not shown on inventory reports, otherwise (not empty), the container is tracked as an inventory item.

CON_CONTROL_CD CHAR 5

Defines the group currently responsible for managing the waste package. Possible values would be "GEN", "ENGR", "OPS" and "EXT" (External)

CON_DEADLINE_DT DATE

Date by which packages containing hazardous waste must be shipped.

CON_DISPOSAL_DT DATE

Date that the waste package was buried, or the date of final disposal.

CON_DISPOSAL_DT DATE

New attribute. Data from CON_TREATMENT_DT (only used for PCB Disposal Date currently) will be copied here.

CON_DNGR_FLAG VARCHAR2(1) DOMAIN: YESNO

'Y' indicates that the waste is regulated under RCRA or WDOE (WAC 173), meaning it is hazardous or, as Darlene Hagel prefers, "Dangerous" waste..

CON_FLASHPOINT VARCHAR2(6)

Description of flashpoint of the contents, necessary only for a flammable material. F will be used to indicate Fahrenheit and C will be used to indicate Celsius.

CON_FLASHPOINT VARCHAR2(6)

Moved from HAZDETAIL per TAH 11/16/99 - Waste Generation Field Display.

CON_GENER_COMMENT VARCHAR2(2000) DOMAIN: COMMENTS

Generator comment related to this package.

CON_GENER_VER_FLAG VARCHAR2(1)

A flag verifying that the data has been reviewed and approved by the generator and management for input to the Annual Dangerous Waste Report.

CON_GENER_WASTE_DESCR VARCHAR2(255)

Generator prepared waste content description.

CON_GENRL_TSD_COMMENT VARCHAR2(2000) DOMAIN: COMMENTS

Internal comments by SW Engineering and SW Operations.

CON_GENRL_TSD_COMMENT VARCHAR2(2000) DOMAIN: COMMENTS

Renamed from CON_SWE_COMMENT. Existing data from SWE and SWO Comments will be combined into General TSD Comment.

CON_GROSS_WGT NUMBER 10

Gross weight of a waste container. It includes the weight of the waste, of the container and of any shielding. Gross weight cannot exceed waste description weight plus container weight plus hazardous component weight.

CON_LABPACK_FLAG VARCHAR2(1) DOMAIN: YESNO

Flags whether or not a container is a lab pack. The flag is Y or N.

CON_LDR_CD_FLAG VARCHAR2(1) DOMAIN: YESNO
Indicates that the waste has Land Disposal Requirement codes associated with it. Y or null.

CON_LDR_OTN_LTR_FLAG VARCHAR2(1) DOMAIN: YESNO
LDR One-Time Notification Letter flag - when checked yes, the LDR one-time notification letter report will also be printed when the LDR Notification report (R353) is requested. Reference SCR 1131 for details.

CON_LOCN_GEN_DETAIL VARCHAR2(10)
Detailed location of waste container while under the generator's control. The facility identification, CON_LOCN_FACIL_ID, must also be provided while the waste container is under the generator's control. Other location data is completed when a waste package arrives at the TSD facility.

CON_LOCN_LAST_ONSITE VARCHAR2(11)
The last onsite location of a package which has been shipped offsite.

CON_LOCN_MODULE VARCHAR2(3)
Element to describe a waste location within a Facility / Unit. When used at an "above-ground" facility, the MODULE describes a row of drums, two wide. Within the burial grounds, the MODULE is used to describe an identifiable cluster of drums arranged on a pallet.

CON_LOCN_TIER_LVL VARCHAR2(1)
Used with a MODULE, the tier level describes the location of a drum when drums are stacked on top of one another. A '1' would indicate the drum is on the floor, '2' is above '1' etc.

CON_LOCN_TIER_POS VARCHAR2(6)
Used with the MODULE to describe the sequence number location of a waste container. A module can have two sides (A / B), so tier position 'A4' would mean the 4th container on Module 'A'.

CON_PACKAGING_WGT NUMBER 10

CON_PH VARCHAR2(5)
The pH of waste package content.

CON_PH VARCHAR2(5)
Moved from HAZDETAIL per TAH 11/16/99 - Waste Generation Field Display.

CON_PHYS_STATE_CD VARCHAR2(3)
Describes the actual physical state of the waste. Includes "S" for solid, "L" for liquid, "G" for sludge, and "M" for compressed gas.

CON_PKG_ID VARCHAR2(14)

Unique package identification number that is assigned to the outer waste package. The number is assigned by the waste generator and is used for tracking all waste.

CON_RAD_CD VARCHAR2(3)

If not null, indicates the RAD waste secondary waste type. Valid values are "LLW" for Low Level Waste, "TRU" for Transuranic Waste, and "USG" for Unsegregated, NULL = Not radioactive. USG is not applicable to new items; included for legacy wastes only.

CON_SEC_PKG_ID VARCHAR2(14)

Unique secondary package identification number that is assigned to the outer waste package and placed on the container in the form of a non-bar code label. In addition to the CON_PKG_ID field, the container may be marked with a generator/facility specific identifier to allow Solid Waste Operations and generators to easily identify the source of the container.

CON_SHIP_DT DATE

The date on which the package was shipped from the generator.

CON_SHIP_ITEM_NUM VARCHAR2(4)

Line item number for the manifest on which the package is shipped from the generator.

CON_SHIP_ITEM_NUM VARCHAR2(4)

Changed name from CON_ITEM_NUM

CON_SHIP_MFST_NUM VARCHAR2(10)

Manifest number on which the package is being shipped from the generator.

CON_SHIP_MFST_NUM VARCHAR2(10)

Changed name from CON_MFST_NUM

CON_SPENTSOLV_FLAG VARCHAR2(1) DOMAIN: YESNO

Indicates that the waste contains spent solvents.

CON_SRCE_CHRG_CD VARCHAR2(8)

A charge code to be used in billing for this package.

CON_TARE_WGT NUMBER 10

The weight of an empty waste container. This tare weight may include any shielding material required.

CON_TO_BE_VERIFIED_FLAG VARCHAR2(1) DOMAIN: YESNO

CON_TSCA_FLAG VARCHAR2(1) DOMAIN: YESNO

'Y' indicates that the waste is regulated under TSCA. Usually applies to PCB wastes.

CON_TSD_ACCEPT_DT DATE

Identifies the date that the TSD accepts custody, and legal responsibility for a waste container. If a container is shipped to multiple TSD's, only the original, first receipt is recorded.

CON_TSD_RECEIPT_DT DATE

Identifies the date that a waste container was received at a TSD. The TSD may accept the waste on a different (later) date.

CON_UHC_APPL CHAR 1

Indicates the presence of Underlying Hazardous Constituents for a waste package. Valid values are 'P' = Present, 'A' = Absent, and 'N' = Not applicable.

CON_UHC_APPL CHAR 1

Renamed from HDET_UNDER

CON_UHC_DETERM CHAR 1

The method used to determine if Underlying Hazardous Constituents applied to a waste package. Valid values include NULL, 'A' = Analysis, 'G' = 'Generator Knowledge', 'B' = Both Analysis and Generator Knowledge.

CON_WASTEWATER_FLAG VARCHAR2(1) DOMAIN: YESNO

Indicates that the waste contains wastewater.

CON_WASTE_WGT NUMBER 12

Total weight of the contents found in a specific waste container. Units are kilograms.

DNGR_CNTR_STATUS VARCHAR2(2)

Status codes of an hazardous waste container. Example: MT - empty, TR - triple rinsed, F - full, and PF - part full.

DNGR_DEBRIS_FLAG CHAR 1

Identifies the waste as being or containing debris.

DNGR_DESIG_CD VARCHAR2(3)

The designation type applied to hazardous, mixed-radioactive and PCB waste in this waste package. Washington Administrative Code (WAC) 173-303 provides the criteria for these solid waste types. D - dangerous waste, E - extremely hazardous waste, RD - radioactive dangerous waste, and RE - radioactive extremely hazardous waste.

DNGR_SUBPART_CC VARCHAR2(1)

Yes/No flag indicating the waste container is or is not subject to Subpart CC of 40 CFR 265.1080 (air emissions).

DNGR_TREAT_RESID_FLAG VARCHAR2(1) DOMAIN: YESNO

RAD_BEG_COORD_N VARCHAR2(6)

Identifies the beginning north coordinate assigned to a specific location used to store or dispose of solid waste. The Hanford coordinate system is used.

RAD_BEG_COORD_W VARCHAR2(6)

Identifies the beginning west coordinate assigned to a specific location used to store or dispose of solid waste. The Hanford coordinate system is used.

RAD_BG_DOSE_RATE NUMBER 38

Dose rate from beta-gamma radiation for the package.

RAD_CALC_CNTR_VOL NUMBER 10

Defaults to CON_CNTR_VOL. Used as the package volume for performing RAD calculations.

RAD_CALC_DECAY_DT DATE

Date that the isotope inventory for the package was valid.

RAD_CALC_WASTE_WGT , NUMBER 12

Defaults to CON_WASTE_WGT, the container weight used for all RAD calculations.

RAD_COMBUST VARCHAR2(1)

Yes or no flag to indicate whether or not the waste is combustible.

RAD_CPS_CNTYP_CD CHAR

RAD Container type (1 - 9) determined as part of the criticality analysis. Displayed on the Fissile Barcode Label and SWIR343 Fissile Inventory report.

RAD_DE_CI_FLAG VARCHAR2(1)

Used by SWE to bypass the calculation of dose equivalent curies and therefore exclude specially packaged waste container(s) from the DE-Ci sum for a facility.

RAD_END_COORD_N VARCHAR2(6)

Identifies the ending north coordinate assigned to a specific location used to store or dispose of solid waste. The Hanford coordinate system is used.

RAD_END_COORD_W VARCHAR2(6)

Identifies the ending west coordinate assigned to a specific location used to store or dispose of solid waste. The Hanford coordinate system is used.

RAD_EXCEED_ISB_LIM VARCHAR2(1)

Yes or no flag to indicate whether or not the waste exceeds Interim Safety Basis limits for waste receipt in the low-level waste burial grounds.

RAD_GPS_FLAG VARCHAR2(1)

RAD_HANDLING VARCHAR2(1)

Identifies whether a container is considered contact handled or remote handled. RDET_HANDLING will be set whenever RDET_BG_DOSE_RATE (CntrDose Rate) is changed. RDET_HANDLING will be set to R if a dose rate over 200 is entered, will be set to C if a dose rate of 200 or less is entered, and will be ignored if a null dose rate is entered.

RAD_NEUT_DOSE_RATE NUMBER 8

Neutron dose rate contributions for transuranic waste with greater than 20 mrem/hr shall be reported separately on the SWSDR. The dose rate is measured at 1 cm for contact handled waste and 1 m for remote handled waste.

RAD_RAD_RECALC_DT DATE

Date that the stored RAD values (DE-Ci, FGE, Activity or Waste Category) were last updated.

RAD_RELOC_DT DATE

Date that a container was relocated after being accepted by Solid Waste Operations.

10/7/99 - History starts when the package is accepted at the TSD. New record whenever the facility or unit changes. CL Stratman

RAD_RSWIMS_COUNT NUMBER 4

The count of containers described by the current container record. Not available for data entry. The source is old RSWIMS data from the time when multiple containers could be defined in one record.

RAD_SHIELD VARCHAR2(1)

A code indicating what type of shielding is in the container.

RAD_STAB_FLAG VARCHAR2(1) DOMAIN: YESNO

This field is used with radioactive waste to tell whether the waste has been stabilized or not. The volume of stabilized waste is reported.

In the past items in HICs were considered to be stabilized but there are 2 other ways to stabilize waste - grouting in place and something else. So instead of looking at the overpack of a container and guessing whether it had been stabilized Tech Services can look at this flag. Ref. Mark Ellefson 9/99.

RAD_THERMAL_POWER NUMBER 38

The thermal power generation of a specific radioactive waste package. Units are watts per cubic foot.

RAD_TOT_DE_CI NUMBER 38

Contains the sum total dose equivalence for a given package.

RAD_TOT_FISSILE_FGE NUMBER 38

The Fissile Gram Equivalence due specifically to Fissionable (ISO_FISSILE_FLAG = 'Y') Isotopes.

RAD_TOT_PE_CI NUMBER 38

Total plutonium equivalent curies of listed transuranic elements (isotopes) identified in the isotope table as being measured in grams.

RAD_TOT_PU_FGE NUMBER 38

Total plutonium 239 fissile gram equivalent of listed transuranic elements (isotopes) which are identified in the isotope table as being measured in grams.

RAD_U_LIMIT_FRACTION NUMBER 38

Manually entered fraction for the U part of the FGE. Multiplied by the FGE it gives the corrected value for the Uranium in the package. The value of the fraction comes from process knowledge.

RAD_VENT_CD VARCHAR2(1)

Yes/No flag indicating the existence or non-existence of a vent on the radioactive waste container.

Change RDET_VENT_FLAG to multiple choice. Existing records with Yes value will remain but Yes cannot be used on new records or updates (?LOV_FLAG = N). DLH to provide list of values.

RAD_VENT_CD VARCHAR2(1)

Users have asked that this flag be made generally available to all containers, not just Rad.

Renamed from RDET_VENT_FLAG. Change to multiple choice per DLH and CLS 11/16/99. Current Yes and No (?) values will remain with LOV = NO.

RAD_WASTE_CAT VARCHAR2(5)

Waste Category of radioactive and mixed waste. Typical values would be WC1, WC3, or GTWC3.

RAD_WSRD_REV VARCHAR2(2)

The revision number of the WSRD which was current at the time the WSRD was associated to the package.

TSCA_PCB_DESCR VARCHAR2(40)

Standard description of PCB contents valid for PCB wastes only. Validated against the miscellaneous codes table.

TSCA_PCB_PPM VARCHAR2(6)

Concentration of PCB material. Valid entries include "<2," "2-49," "50-499," and ">499".

TSCA_PCB_REMOVED_DT DATE

Date PCB item was removed from service and became PCB waste. Contains a valid date or is null.

TSCA_PCB_SUBTYPE VARCHAR2(1)

Storage category code for hazardous, mixed-radioactive and PCB solid waste. One character code defining the PCB according to sub-type. Valid values are 'A' = Article Container, 'E' = Contaminated Electrical Equipment, 'S' = Submarine Reactor Compartment, 'C' = container, 'P' = Capacitor, 'T' = Transformer.

TSCA_PCB_TYPE VARCHAR2(1)

One character code defining the type of PCB item. Valid values are 'ARTICLE', 'ARTICLE CONTAINER', 'CONTAINER', 'CONTAMINATOR ELECTRICAL EQUIPMENT'.

TSCA_PCB_WGT NUMBER 12

The weight of PCBs in the waste package.

WASTECOMP

Description : Reference list of the chemical constituents (by CAS#) and generic waste components which may be present in a waste package or referenced in a waste designation.

Notes : Data Conversion for Waste Components -

1) Complete CHEMCOMP cleanup in SWITS for records marked to be renamed in HAZCOMP table (reference /h/Swits/Datachange/Chemcomp_Cleanup/HOW TO). Any additional cleanup the customer can identify before the C/S conversion will be improvements in the new system - especially ad hoc reporting on waste components in packages.

2) After cleanup is complete perform integrity checks on HAZCOMP table -

a) All HCC_IDs should match HCC_CAS (where HCC_CAS is not null). If the HCC_CAS is the wrong number it can simply be corrected on U420. If the HCC_ID is wrong then record must be marked for cleanup and step #1 performed.

b) The only records with HCC_DISCARD = Y should be TEMP records (currently used as LOV flag). Any records with discard = Y that are not TEMPs are probably aimed for cleanup (step #1).

c) HCC_NEWID should be NULL on all records if the cleanup is complete.

3) Compare extract of SWEA CASREF table with SWITS HAZCOMP. ALL records in SWEA should match a record in SWITS including the description (i.e. SWEA CAS# = HCC_ID and SWEA DESCR = HCC DESCR). Few differences are expected. If a record in SWEA is missing from SWITS then it can be added to the HAZCOMP table. If the descriptions are different, the correct description needs to be in the HAZCOMP table.

4) After all SWEA CAS records are accounted for in SWITS, compare extract of SWITS HAZCOMP, excluding TEMP records, with SWEA CASREF. Any CAS #s in SWITS that are not in SWEA will need to be verified and designated out by customer. Not sure if "designated out" is the correct terminology - DW numbers associated, toxicity, persistence, etc. recorded in new system. Some of these mismatches may have been a result of a data entry error in SWITS or SWEA.

5) Load WASTECOMP table from current SWITS HAZCOMP -

HCC_ID into WASTECOMP.WC_COMP_ID (new name for HCC_ID)

HCC_CAS not converting, same as HCC_ID when present

HCC_DESCR into WASTECOMP.DESCRPTION

HCC_NEWID not converting

HCC_DISCARD not converting

HCC_F039 load into WASTECOMP.F039

HCC_UNDER not converting into WASTECOMP - may be used for loading UNDERHAZCONST?

Other WASTECOMP attributes -

LOV - all TEMPs are set to 'N', others set to 'Y'

PERSISTENCE - load from SWEA CASREF ??

CORROSIVE_PROP & IGNITABLE_PROP - load from SWEA CASREF ??

INPUT BY & INPUT DATE - load from SWEA CASREF ??

UPDATE BY & UPDATE DATE - load from SWEA CASREF ??

WC_COMP_ID VARCHAR2(12)

The Chemical Abstracts (CAS) number of a hazardous chemical component or a generic CAS number (GCN) assigned to waste components other than chemicals. CAS number or GCN are the unique identifier waste component.

WC_CORROSIVE_PROP CHAR 1

Corrosive property of a waste component, such as "Acid", "Base", or "Other".

WC_DESCR VARCHAR2(70)

Text description of a hazardous chemical component.

WC_IGNITABLE_PROP CHAR 1

Attribute describing an ignitability characteristic of a waste component, such as "flammable gas", "flammable liquid", "oxidizer", or "ignitable solid".

WC_INPUT_BY VARCHAR2

ID of the person inputting the CAS#

WC_INPUT_DT DATE

The date the CAS# was input

WC_LOV VARCHAR2(1) DOMAIN: YESNO

'Y' indicates that the waste component is available through lists of values, 'N' = not displayed.

WC_PERSISTENCE VARCHAR2

Identifies certain chemicals as a Polycyclic Aromatic Hydrocarbons (PAH) or Halogenated Hydrocarbons (HH). Used to determine the applicability of WA State Persistence codes WP01 - WP03.

WC_UPDATE_BY VARCHAR2

ID of the person updating the CAS# information

WC_UPDATE_DT DATE
Date the CAS# information was modified.

WASTELOG

Description : This table contains a list of packages for which changes will be logged into the transaction log.

WL_PKG_ID VARCHAR2(14)
Waste Package Log Package ID

WSRD

Description : Waste specification record information is maintained in this table.

WSRD_DESCR VARCHAR2(255)
Brief description of the WSRD.

WSRD_EXPIRE_DT DATE
The date the WSRD expires and is no longer usable.

WSRD_NUM VARCHAR2(3)
The identifying number of the WSRD.

WSRD_REV NUMBER 2
The current revision of the WSRD.

WSRD_SCAT_CD VARCHAR2(3)
Default Storage Category Code for the WSRD.

When a Waste Specification Record (WSRD) is applied to a container and the container does not have a Storage Category assigned to it, the default Storage Category for the WSRD is assigned.

If a Storage Category had been assigned to a container and it does not match the WSRD Storage Category then an informational message is displayed to the user.

WSRDREV

Description : Revisions to WSRD's
Notes : Only the latest revision may be deleted

WSREV_DESCR VARCHAR2(50)
Description of the change that prompted the revision.

WSREV_DESCR VARCHAR2(50)
De-normalized from WSRD via the primary key

WSREV_DT

DATE

The date the revision was valid.

WSREV_DT

DATE

Must be current date or date not less than the date of the highest previous revision

WSREV_REV

VARCHAR2(2)

The revision of the WSRD.

3.5.1.2 Relationships between SWITS Objects

The following table shows the relationships between SWITS objects. Each relationship is bi-directional. For example, a BATCH is a batch of 0-to-many BATCH TREATMENTS. A BATCH TREATMENT is the treatment of 1 and only 1 BATCH.

Table 5. Relationships between SWITS Objects

BATCH -> batch of 0 to -1 BATCH TREATMENT

BATCH TREATMENT -> treatments of 1 to 1 BATCH

BATCH -> parent of 0 to -1 WASTE

WASTE -> created out of 0 to 1 BATCH

BATCH -> treats 0 to -1 WASTE

WASTE -> treated in 0 to 1 BATCH

BATCH TREATMENT -> batch of 1 to 1 TREATMENT

TREATMENT -> treatment for 0 to -1 BATCH TREATMENT

BATCH TREATMENT -> treatments of 1 to 1 BATCH

BATCH -> batch of 0 to -1 BATCH TREATMENT

CHRGCODE -> customer adjustments of 0 to -1 RADBILLCHG

RADBILLCHG -> adjustments for 0 to 1 CHRGCODE

CHRGCODE -> customer billing of 0 to -1 RADBILL

RADBILL -> billing records for 1 to 1 CHRGCODE

CHRGCODE -> established for 1 to 1 GENGROUP

GENGROUP -> charges against 0 to -1 CHRGCODE

CHRGCODE -> used by 1 to 1 COMPANY

COMPANY -> charging to 0 to -1 CHRGCODE

CINVENTORY -> purchased on 0 to 1 PURORDER
PURORDER -> purchase 0 to -1 CINVENTORY

COMPANY -> charging to 0 to -1 CHRGCODE
CHRGCODE -> used by 1 to 1 COMPANY

COMPANY -> employing 0 to -1 PERSON
PERSON -> employed by 1 to 1 COMPANY

COMPANY -> generating waste for 0 to -1 PROFILE
PROFILE -> created for 1 to 1 COMPANY

COMPANY -> located in 1 to 1 STATE
STATE -> may contain 0 to -1 COMPANY

COMPANY -> offsite receiving 0 to -1 SHIPMENT
SHIPMENT -> shipped offsite to 1 to 1 COMPANY

COMPANY -> owns 0 to -1 WASTE
WASTE -> owned by 0 to 1 COMPANY

COMPANY -> transporting 0 to -1 SHIP TRANSP
SHIP TRANSP -> transported by 1 to 1 COMPANY

COMPATIBILITY -> compatible with 0 to -1 WC COMPATIBILITY
WC COMPATIBILITY -> properties of 1 to 1 COMPATIBILITY

CONREL -> created from 1 to 1 WASTE
WASTE -> creates 0 to -1 CONREL

CONREL -> relating to 1 to 1 WASTE
WASTE -> referring to 0 to -1 CONREL

CONSIZE -> offered for 1 to 1 CONTYPE
CONTYPE -> offered in 0 to -1 CONSIZE

CONSIZE -> size of 0 to -1 PURORDER
PURORDER -> size of 1 to 1 CONSIZE

CONSIZE -> volume of 0 to -1 WASTE
WASTE -> size of 1 to 1 CONSIZE

CONTYPE -> container type of 0 to -1 WASTE
WASTE -> type of 1 to 1 CONTYPE

CONTYPE -> offered in 0 to -1 CONSIZE
CONSIZE -> offered for 1 to 1 CONTYPE

CONTYPE -> referenced 0 to -1 PURORDER
PURORDER -> references 1 to 1 CONTYPE

CONTYPE -> speced by 0 to -1 DOTSPEC
DOTSPEC -> specification 1 to 1 CONTYPE

DES DW -> DW candidate of 1 to 1 DWNUM
DWNUM -> source of 0 to -1 DES DW

DES DW -> WA reg codes for 1 to 1 DESIGNATION
DESIGNATION -> WA reg codes of 0 to -1 DES DW

DES LDRDW -> certification of 1 to 1 LDRCERT
LDRCERT -> certification for 0 to -1 DES LDRDW

DES LDRDW -> member of 1 to 1 DESIGNATION
DESIGNATION -> contains 0 to -1 DES LDRDW

DES LDRDW -> member of 1 to 1 DW LDRSUBCAT
DW LDRSUBCAT -> own 0 to -1 DES LDRDW

DES SOLVENT -> designated solvents of 1 to 1 DESIGNATION
DESIGNATION -> contain solvents 0 to -1 DES SOLVENT

DES SOLVENT -> solvent of 1 to 1 SOLVENT
SOLVENT -> parent of 0 to -1 DES SOLVENT

DES UHC -> UHC of 1 to 1 UHC
UHC -> own 0 to -1 DES UHC

DES UHC -> member of 1 to 1 DESIGNATION
DESIGNATION -> contains 0 to -1 DES UHC

DES WASTECOMP -> referenced by 1 to 1 DESIGNATION
DESIGNATION -> referencing 0 to -1 DES WASTECOMP

DES WASTECOMP -> referencing 1 to 1 SRC WASTECOMP
SRC WASTECOMP -> referenced by 0 to -1 DES WASTECOMP

DES WASTECOMP -> referencing 1 to 1 WASTECOMP
WASTECOMP -> referenced by 0 to -1 DES WASTECOMP

DESIGNATION -> WA reg codes of 0 to -1 DES DW
DES DW -> WA reg codes for 1 to 1 DESIGNATION

DESIGNATION -> contain solvents 0 to -1 DES SOLVENT
DES SOLVENT -> designated solvents of 1 to 1 DESIGNATION

DESIGNATION -> contains 0 to -1 DES LDRDW
DES LDRDW -> member of 1 to 1 DESIGNATION

DESIGNATION -> contains 0 to -1 DES UHC
DES UHC -> member of 1 to 1 DESIGNATION

DESIGNATION -> referencing 0 to -1 DES WASTECOMP
DES WASTECOMP -> referenced by 1 to 1 DESIGNATION

DOTSPEC -> describes 0 to -1 PURORDER
PURORDER -> described by 0 to 1 DOTSPEC

DOTSPEC -> specification 1 to 1 CONTYPE
CONTYPE -> speced by 0 to -1 DOTSPEC

DOTSPEC -> specifies 0 to -1 WASTE
WASTE -> specified by 0 to 1 DOTSPEC

DW LDRSUBCAT -> describes 0 to -1 PKG LDRDW
PKG LDRDW -> described by 1 to 1 DW LDRSUBCAT

DW LDRSUBCAT -> own 0 to -1 DES LDRDW
DES LDRDW -> member of 1 to 1 DW LDRSUBCAT

DW LDRSUBCAT -> subcategory of 1 to 1 DWNUM
DWNUM -> parent of 0 to -1 DW LDRSUBCAT

DW WASTECOMP -> restricted by 1 to 1 DWNUM
DWNUM -> restricting 0 to -1 DW WASTECOMP

DW WASTECOMP -> restricting 1 to 1 WASTECOMP
WASTECOMP -> restricted by 0 to -1 DW WASTECOMP

DWNUM -> defines 0 to -1 PKG DW
PKG DW -> defined by 1 to 1 DWNUM

DWNUM -> parent of 0 to -1 DW LDRSUBCAT
DW LDRSUBCAT -> subcategory of 1 to 1 DWNUM

DWNUM -> rates 0 to -1 SOLVENT
SOLVENT -> rated by 1 to 1 DWNUM

DWNUM -> referenced by 0 to -1 TBG DW
TBG DW -> dw numbers of 1 to 1 DWNUM

DWNUM -> restricting 0 to -1 DW WASTECOMP
DW WASTECOMP -> restricted by 1 to 1 DWNUM

DWNUM -> source of 0 to -1 DES DW
DES DW -> DW candidate of 1 to 1 DWNUM

ENCASEMENT -> filled with 0 to -1 WASTE
WASTE -> placed in 1 to 1 ENCASEMENT

ENCASEMENT -> residing in 1 to 1 FACUNIT
FACUNIT -> the residence of 0 to -1 ENCASEMENT

FACILITY -> destination of 0 to -1 SHIPMENT
SHIPMENT -> shipped to 0 to 1 FACILITY

FACILITY -> divided into 0 to -1 FACUNIT
FACUNIT -> floor or part of 1 to 1 FACILITY

FACILITY -> location of 0 to -1 WASTE
WASTE -> located at 1 to 1 FACILITY

FACILITY -> scheduled by 1 to 1 PERSON
PERSON -> scheduler of 0 to -1 FACILITY

FACILITY -> scheduled destination of 0 to -1 PKG SCHED SHIP
PKG SCHED SHIP -> going to 0 to 1 FACILITY

FACILITY -> source of 0 to -1 TBGWASTE
TBGWASTE -> originating from 1 to 1 FACILITY

FACILITY -> source of 0 to -1 WASTE
WASTE -> originating from 0 to 1 FACILITY

FACILITY -> supervised by 1 to 1 PERSON
PERSON -> supervisor of 0 to -1 FACILITY

FACUNIT -> floor or part of 1 to 1 FACILITY
FACILITY -> divided into 0 to -1 FACUNIT

FACUNIT -> the residence of 0 to -1 ENCASEMENT
ENCASEMENT -> residing in 1 to 1 FACUNIT

FACUNIT -> unit location of 0 to -1 WASTE
WASTE -> located at unit 0 to 1 FACUNIT

GENERATOR -> a member of 1 to 1 GENGROUP
GENGROUP -> identifying 0 to -1 GENERATOR

GENERATOR -> generator of 0 to -1 WASTE
WASTE -> generated by 0 to 1 GENERATOR

GENERATOR -> identifying 1 to 1 PERSON
PERSON -> a member of 0 to -1 GENERATOR

GENGROUP -> charges against 0 to -1 CHRGCODE
CHRGCODE -> established for 1 to 1 GENGROUP

GENGROUP -> generator of 0 to -1 TBGWASTE
TBGWASTE -> generated by 1 to 1 GENGROUP

GENGROUP -> having a POC of 1 to 1 PERSON
PERSON -> the contact for 0 to -1 GENGROUP

GENGROUP -> identifying 0 to -1 GENERATOR
GENERATOR -> a member of 1 to 1 GENGROUP

GENGROUP -> maintaining 0 to -1 WASTE
WASTE -> maintained by 1 to 1 GENGROUP

GENGROUP -> posing 0 to -1 GGRP YN
GGRP YN -> posed for 1 to 1 GENGROUP

GENGROUP -> requesting 0 to -1 GGRP DATE
GGRP DATE -> requested by 1 to 1 GENGROUP

GENGROUP -> stating 0 to -1 GGRP COMMENT
GGRP COMMENT -> statements for 1 to 1 GENGROUP

GGC RESPONSE LOV -> valid values for 1 to 1 GGRP COMMENT
GGRP COMMENT -> validated by 0 to -1 GGC RESPONSE LOV

GGRP COMMENT -> stated for 0 to -1 PKG GGCOMMENT
PKG GGCOMMENT -> response for 1 to 1 GGRP COMMENT

GGRP COMMENT -> statements for 1 to 1 GENGROUP
GENGROUP -> stating 0 to -1 GGRP COMMENT

GGRP COMMENT -> validated by 0 to -1 GGC RESPONSE LOV
GGC RESPONSE LOV -> valid values for 1 to 1 GGRP COMMENT

GGRP DATE -> date of 0 to -1 PKG GGDATE
PKG GGDATE -> response for 1 to 1 GGRP DATE

GGRP DATE -> requested by 1 to 1 GENGROUP
GENGROUP -> requesting 0 to -1 GGRP DATE

GGRP YN -> answered by 0 to -1 PKG GGYN
PKG GGYN -> answering 1 to 1 GGRP YN

GGRP YN -> posed for 1 to 1 GENGROUP
GENGROUP -> posing 0 to -1 GGRP YN

ISOTOPE -> source of 0 to -1 PKG ISOTOPE
PKG ISOTOPE -> quantity of 1 to 1 ISOTOPE

LDRCERT -> certification for 0 to -1 DES LDRDW
DES LDRDW -> certification of 1 to 1 LDRCERT

LDRCERT -> disposal instructions for 0 to -1 PKG LDRDW
PKG LDRDW -> reference 0 to 1 LDRCERT

NONCONCODE -> defect type of 0 to -1 PKG NONCONFORM
PKG NONCONFORM -> instance of 1 to 1 NONCONCODE

NONCONCODE -> expressed in 0 to -1 SHIP NONCONFORM
SHIP NONCONFORM -> expressing 1 to 1 NONCONCODE

PERSON -> a member of 0 to -1 GENERATOR
GENERATOR -> identifying 1 to 1 PERSON

PERSON -> author of 0 to -1 WSRDREV
WSRDREV -> authored by 1 to 1 PERSON

PERSON -> employed by 1 to 1 COMPANY
COMPANY -> employing 0 to -1 PERSON

PERSON -> residents of 1 to 1 STATE
STATE -> location of 0 to -1 PERSON

PERSON -> responsible for 0 to -1 PROFILE
PROFILE -> responsibility of 1 to 1 PERSON

PERSON -> scheduler of 0 to -1 FACILITY
FACILITY -> scheduled by 1 to 1 PERSON

PERSON -> supervisor of 0 to -1 FACILITY
FACILITY -> supervised by 1 to 1 PERSON

PERSON -> the contact for 0 to -1 GENGROUP
GENGROUP -> having a POC of 1 to 1 PERSON

PKG DOTCATEGORY -> categorizing 1 to 1 WASTE
WASTE -> categorized by 0 to -1 PKG DOTCATEGORY

PKG DW -> defined by 1 to 1 DWNUM
DWNUM -> defines 0 to -1 PKG DW

PKG DW -> designating 1 to 1 WASTE
WASTE -> designated by 0 to -1 PKG DW

PKG GGCOMMENT -> response for 1 to 1 GGRP COMMENT
GGRP COMMENT -> stated for 0 to -1 PKG GGCOMMENT

PKG GGCOMMENT -> stated for 1 to 1 WASTE
WASTE -> commented on by 0 to -1 PKG GGCOMMENT

PKG GGDATE -> date of 1 to 1 WASTE
WASTE -> response for 0 to -1 PKG GGDATE

PKG GGDATE -> response for 1 to 1 GGRP DATE
GGRP DATE -> date of 0 to -1 PKG GGDATE

PKG GGYN -> answered for 1 to 1 WASTE
WASTE -> answering 0 to -1 PKG GGYN

PKG GGYN -> answering 1 to 1 GGRP YN
GGRP YN -> answered by 0 to -1 PKG GGYN

PKG ISOTOPE -> isotopes of 1 to 1 WASTE
WASTE -> rad pkg of 0 to -1 PKG ISOTOPE

PKG ISOTOPE -> quantity of 1 to 1 ISOTOPE
ISOTOPE -> source of 0 to -1 PKG ISOTOPE

PKG LDRDW -> associated with 1 to 1 WASTE
WASTE -> classified by 0 to -1 PKG LDRDW

PKG LDRDW -> described by 1 to 1 DW LDRSUBCAT
DW LDRSUBCAT -> describes 0 to -1 PKG LDRDW

PKG LDRDW -> reference 0 to 1 LDRCERT
LDRCERT -> disposal instructions for 0 to -1 PKG LDRDW

PKG NONCONFORM -> defects of 0 to 1 WASTE
WASTE -> defects identified by 0 to -1 PKG NONCONFORM

PKG NONCONFORM -> instance of 1 to 1 NONCONCODE
NONCONCODE -> defect type of 0 to -1 PKG NONCONFORM

PKG PKGINGCOMP -> components of 1 to 1 WASTE
WASTE -> physical makeup of 0 to -1 PKG PKGINGCOMP

PKG PKGINGCOMP -> described by 1 to 1 PKGINGCOMP
PKGINGCOMP -> description of 0 to -1 PKG PKGINGCOMP

PKG ROUTINE -> managed under 1 to 1 WASTE
WASTE -> manages 0 to -1 PKG ROUTINE

PKG SCHED SHIP -> going to 0 to 1 FACILITY
FACILITY -> scheduled destination of 0 to -1 PKG SCHED SHIP

PKG SCHED SHIP -> reviewed by 0 to -1 REVIEW NOTE
REVIEW NOTE -> the review for 1 to 1 PKG SCHED SHIP

PKG SCHED SHIP -> scheduling 1 to 1 WASTE
WASTE -> scheduled on 0 to -1 PKG SCHED SHIP

PKG SHIPITEM -> referencing 1 to 1 SHIPITEM
SHIPITEM -> containing 0 to -1 PKG SHIPITEM

PKG SHIPITEM -> representing 1 to 1 WASTE
WASTE -> shipped on 0 to -1 PKG SHIPITEM

PKG SOLVENT -> has solvents 1 to 1 WASTE
WASTE -> contains solvents 0 to -1 PKG SOLVENT

PKG SOLVENT -> solvent of 1 to 1 SOLVENT
SOLVENT -> included in 0 to -1 PKG SOLVENT

PKG UHC -> composed of 1 to 1 UHC
UHC -> defines 0 to -1 PKG UHC

PKG UHC -> reference 1 to 1 WASTE
WASTE -> referenced by 0 to -1 PKG UHC

PKG WASTECOMP -> made up of 1 to 1 WASTECOMP
WASTECOMP -> makes up 0 to -1 PKG WASTECOMP

PKG WASTECOMP -> present in 1 to 1 WASTE
WASTE -> composed of 0 to -1 PKG WASTECOMP

PKGINGCOMP -> description of 0 to -1 PKG PKGINGCOMP
PKG PKGINGCOMP -> described by 1 to 1 PKGINGCOMP

PROFILE -> WSRd profile for 1 to 1 WSRD
WSRD -> profiled by 0 to -1 PROFILE

PROFILE -> associated with 0 to -1 STREAM PROFILE
STREAM PROFILE -> streams 1 to 1 PROFILE

PROFILE -> created for 1 to 1 COMPANY
COMPANY -> generating waste for 0 to -1 PROFILE

PROFILE -> profiling 0 to -1 WASTE
WASTE -> profiled by 0 to 1 PROFILE

PROFILE -> responsibility of 1 to 1 PERSON
PERSON -> responsible for 0 to -1 PROFILE

PROFILE -> verified by 0 to -1 VERIFICATION
VERIFICATION -> verifying 0 to 1 PROFILE

PROJ DETAIL -> contain 0 to -1 PROJ SAMPLE
PROJ SAMPLE -> owned by 1 to 1 PROJ DETAIL

PROJ DETAIL -> contained by 1 to 1 WASTE
WASTE -> contain 0 to -1 PROJ DETAIL

PROJ DETAIL -> owned by 1 to 1 PROJECT
PROJECT -> contain 0 to -1 PROJ DETAIL

PROJ SAMPLE -> owned by 1 to 1 PROJ DETAIL
PROJ DETAIL -> contain 0 to -1 PROJ SAMPLE

PROJECT -> contain 0 to -1 PROJ DETAIL
PROJ DETAIL -> owned by 1 to 1 PROJECT

PURORDER -> described by 0 to 1 DOTSPEC
DOTSPEC -> describes 0 to -1 PURORDER

PURORDER -> purchase 0 to -1 CINVENTORY
CINVENTORY -> purchased on 0 to 1 PURORDER

PURORDER -> references 1 to 1 CONTYPE
CONTYPE -> referenced 0 to -1 PURORDER

PURORDER -> size of 1 to 1 CONSIZE
CONSIZE -> size of 0 to -1 PURORDER

RAD VERIFICATION -> performed on 1 to 1 WASTE
WASTE -> verified by 0 to -1 RAD VERIFICATION

RAD VERIFICATION -> verified by 1 to 1 VERIFICATION
VERIFICATION -> performed for 0 to -1 RAD VERIFICATION

RADBILL -> billed during 1 to 1 RADBILLPRD
RADBILLPRD -> billing for 0 to -1 RADBILL

RADBILL -> billing records for 1 to 1 CHRGCODE
CHRGCODE -> customer billing of 0 to -1 RADBILL

RADBILL -> changed by 0 to -1 RADBILLCHG
RADBILLCHG -> changes for 1 to 1 RADBILL

RADBILL -> listing 1 to 1 WASTE
WASTE -> billed on 0 to 1 RADBILL

RADBILLCHG -> adjustments for 0 to 1 CHRGCODE
CHRGCODE -> customer adjustments of 0 to -1 RADBILLCHG

RADBILLCHG -> billing changes in 1 to 1 RADBILLPRD
RADBILLPRD -> change dates of 0 to -1 RADBILLCHG

RADBILLCHG -> changes for 1 to 1 RADBILL
RADBILL -> changed by 0 to -1 RADBILLCHG

RADBILLPRD -> billing for 0 to -1 RADBILL
RADBILL -> billed during 1 to 1 RADBILLPRD

RADBILPRD -> change dates of 0 to -1 RADBILLCHG
RADBILLCHG -> billing changes in 1 to 1 RADBILPRD

REACTIVITY -> describing reaction 0 to -1 WC REACTIVITY
WC REACTIVITY -> exploding when 1 to 1 REACTIVITY

REACTIVITY -> reactivity of 0 to -1 WASTE
WASTE -> rad reactivity 0 to 1 REACTIVITY

RELOCHIST -> locations of 0 to 1 WASTE
WASTE -> relocated based on 0 to -1 RELOCHIST

REVIEW NOTE -> resulting in 0 to 1 REVIEW NOTE CODES
REVIEW NOTE CODES -> the results of 0 to -1 REVIEW NOTE

REVIEW NOTE -> the review for 1 to 1 PKG SCHED SHIP
PKG SCHED SHIP -> reviewed by 0 to -1 REVIEW NOTE

REVIEW NOTE CODES -> the results of 0 to -1 REVIEW NOTE
REVIEW NOTE -> resulting in 0 to 1 REVIEW NOTE CODES

SECWASTYPE -> type 0 to -1 WASTE
WASTE -> type of 0 to 1 SECWASTYPE

SHIP NONCONFORM -> defects of 0 to 1 SHIPMENT
SHIPMENT -> defects identified by 0 to -1 SHIP NONCONFORM

SHIP NONCONFORM -> expressing 1 to 1 NONCONCODE
NONCONCODE -> expressed in 0 to -1 SHIP NONCONFORM

SHIP TRANSP -> transported by 1 to 1 COMPANY
COMPANY -> transporting 0 to -1 SHIP TRANSP

SHIP TRANSP -> transporting 1 to 1 SHIPMENT
SHIPMENT -> transported by 0 to -1 SHIP TRANSP

SHIPITEM -> a part of 1 to 1 SHIPMENT
SHIPMENT -> made up of 0 to -1 SHIPITEM

SHIPITEM -> containing 0 to -1 PKG SHIPITEM
PKG SHIPITEM -> referencing 1 to 1 SHIPITEM

SHIPMENT -> defects identified by 0 to -1 SHIP NONCONFORM
SHIP NONCONFORM -> defects of 0 to 1 SHIPMENT

SHIPMENT -> made up of 0 to -1 SHIPITEM

SHIPITEM -> a part of 1 to 1 SHIPMENT

SHIPMENT -> shipped offsite to 1 to 1 COMPANY

COMPANY -> offsite receiving 0 to -1 SHIPMENT

SHIPMENT -> shipped to 0 to 1 FACILITY

FACILITY -> destination of 0 to -1 SHIPMENT

SHIPMENT -> transported by 0 to -1 SHIP TRANSP

SHIP TRANSP -> transporting 1 to 1 SHIPMENT

SOLVENT -> composed of 1 to 1 WASTECOMP

WASTECOMP -> found in 0 to -1 SOLVENT

SOLVENT -> included in 0 to -1 PKG SOLVENT

PKG SOLVENT -> solvent of 1 to 1 SOLVENT

SOLVENT -> parent of 0 to -1 DES SOLVENT

DES SOLVENT -> solvent of 1 to 1 SOLVENT

SOLVENT -> rated by 1 to 1 DWNUM

DWNUM -> rates 0 to -1 SOLVENT

SOURCE -> calling 0 to -1 SRC WASTECOMP

SRC WASTECOMP -> called from 1 to 1 SOURCE

SRC WASTECOMP -> called from 1 to 1 SOURCE

SOURCE -> calling 0 to -1 SRC WASTECOMP

SRC WASTECOMP -> calling 1 to 1 WASTECOMP

WASTECOMP -> called from 0 to -1 SRC WASTECOMP

SRC WASTECOMP -> referenced by 0 to -1 DES WASTECOMP

DES WASTECOMP -> referencing 1 to 1 SRC WASTECOMP

STATE -> location of 0 to -1 PERSON

PERSON -> residents of 1 to 1 STATE

STATE -> may contain 0 to -1 COMPANY

COMPANY -> located in 1 to 1 STATE

STORAGECAT -> categorizing 0 to -1 WSRD

WSRD -> categorized by 1 to 1 STORAGECAT

STORAGECAT -> describes 0 to -1 WASTE
WASTE -> storage category of 0 to 1 STORAGECAT

STREAM -> profiled by 0 to -1 STREAM PROFILE
STREAM PROFILE -> established for 1 to 1 STREAM

STREAM -> source of 0 to -1 TBGWASTE
TBGWASTE -> sourced from 1 to 1 STREAM

STREAM -> source of 1 to -1 WASTE
WASTE -> sourced from 0 to 1 STREAM

STREAM PROFILE -> established for 1 to 1 STREAM
STREAM -> profiled by 0 to -1 STREAM PROFILE

STREAM PROFILE -> streams 1 to 1 PROFILE
PROFILE -> associated with 0 to -1 STREAM PROFILE

TBG DW -> dw history of 1 to 1 TBGWASTE
TBGWASTE -> parent of 0 to -1 TBG DW

TBG DW -> dw numbers of 1 to 1 DWNUM
DWNUM -> referenced by 0 to -1 TBG DW

TBGWASTE -> generated by 1 to 1 GENGROUP
GENGROUP -> generator of 0 to -1 TBGWASTE

TBGWASTE -> originating from 1 to 1 FACILITY
FACILITY -> source of 0 to -1 TBGWASTE

TBGWASTE -> parent of 0 to -1 TBG DW
TBG DW -> dw history of 1 to 1 TBGWASTE

TBGWASTE -> sourced from 1 to 1 STREAM
STREAM -> source of 0 to -1 TBGWASTE

TBGWASTE -> treated by 1 to 1 TREATMENT
TREATMENT -> treatment method for 0 to -1 TBGWASTE

TREATMENT -> treatment for 0 to -1 BATCH TREATMENT
BATCH TREATMENT -> batch of 1 to 1 TREATMENT

TREATMENT -> treatment method for 0 to -1 TBGWASTE
TBGWASTE -> treated by 1 to 1 TREATMENT

UHC -> UHC of a 1 to 1 WASTECOMP
WASTECOMP -> represented by 0 to -1 UHC

UHC -> defines 0 to -1 PKG UHC
PKG UHC -> composed of 1 to 1 UHC

UHC -> kind of 1 to 1 WASTECOMP
WASTECOMP -> UHC for 0 to -1 UHC

UHC -> own 0 to -1 DES UHC
DES UHC -> UHC of 1 to 1 UHC

VER METHOD -> details 1 to 1 VERIFICATION
VERIFICATION -> detailed by 0 to -1 VER METHOD

VERIFICATION -> detailed by 0 to -1 VER METHOD
VER METHOD -> details 1 to 1 VERIFICATION

VERIFICATION -> performed for 0 to -1 RAD VERIFICATION
RAD VERIFICATION -> verified by 1 to 1 VERIFICATION

VERIFICATION -> verifying 0 to 1 PROFILE
PROFILE -> verified by 0 to -1 VERIFICATION

WA TOXICITY -> implying limits for 0 to -1 WASTECOMP
WASTECOMP -> limited by 0 to 1 WA TOXICITY

WASTE -> answering 0 to -1 PKG GGYN
PKG GGYN -> answered for 1 to 1 WASTE

WASTE -> billed on 0 to 1 RADBILL
RADBILL -> listing 1 to 1 WASTE

WASTE -> categorized by 0 to -1 PKG DOTCATEGORY
PKG DOTCATEGORY -> categorizing 1 to 1 WASTE

WASTE -> classified by 0 to -1 PKG LDRDW
PKG LDRDW -> associated with 1 to 1 WASTE

WASTE -> commented on by 0 to -1 PKG GGCOMMENT
PKG GGCOMMENT -> stated for 1 to 1 WASTE

WASTE -> composed of 0 to -1 PKG WASTECOMP
PKG WASTECOMP -> present in 1 to 1 WASTE

WASTE -> contain 0 to -1 PROJ DETAIL
PROJ DETAIL -> contained by 1 to 1 WASTE

WASTE -> contains solvents 0 to -1 PKG SOLVENT
PKG SOLVENT -> has solvents 1 to 1 WASTE

WASTE -> created out of 0 to 1 BATCH
BATCH -> parent of 0 to -1 WASTE

WASTE -> creates 0 to -1 CONREL
CONREL -> created from 1 to 1 WASTE

WASTE -> defects identified by 0 to -1 PKG NONCONFORM
PKG NONCONFORM -> defects of 0 to 1 WASTE

WASTE -> designated by 0 to -1 PKG DW
PKG DW -> designating 1 to 1 WASTE

WASTE -> generated by 0 to 1 GENERATOR
GENERATOR -> generator of 0 to -1 WASTE

WASTE -> located at 1 to 1 FACILITY
FACILITY -> location of 0 to -1 WASTE

WASTE -> located at unit 0 to 1 FACUNIT
FACUNIT -> unit location of 0 to -1 WASTE

WASTE -> maintained by 1 to 1 GENGROUP
GENGROUP -> maintaining 0 to -1 WASTE

WASTE -> managed under 0 to 1 WSRD
WSRD -> management plan for 0 to -1 WASTE

WASTE -> manages 0 to -1 PKG ROUTINE
PKG ROUTINE -> managed under 1 to 1 WASTE

WASTE -> originating from 0 to 1 FACILITY
FACILITY -> source of 0 to -1 WASTE

WASTE -> owned by 0 to 1 COMPANY
COMPANY -> owns 0 to -1 WASTE

WASTE -> physical makeup of 0 to -1 PKG PKGINGCOMP
PKG PKGINGCOMP -> components of 1 to 1 WASTE

WASTE -> placed in 1 to 1 ENCASEMENT
ENCASEMENT -> filled with 0 to -1 WASTE

WASTE -> profiled by 0 to 1 PROFILE
PROFILE -> profiling 0 to -1 WASTE

WASTE -> rad pkg of 0 to -1 PKG ISOTOPE
PKG ISOTOPE -> isotopes of 1 to 1 WASTE

WASTE -> rad reactivity 0 to 1 REACTIVITY
REACTIVITY -> reactivity of 0 to -1 WASTE

WASTE -> referenced by 0 to -1 PKG UHC
PKG UHC -> reference 1 to 1 WASTE

WASTE -> referring to 0 to -1 CONREL
CONREL -> relating to 1 to 1 WASTE

WASTE -> relocated based on 0 to -1 RELOCHIST
RELOCHIST -> locations of 0 to 1 WASTE

WASTE -> response for 0 to -1 PKG GGDATE
PKG GGDATE -> date of 1 to 1 WASTE

WASTE -> scheduled on 0 to -1 PKG SCHED SHIP
PKG SCHED SHIP -> scheduling 1 to 1 WASTE

WASTE -> shipped on 0 to -1 PKG SHIPITEM
PKG SHIPITEM -> representing 1 to 1 WASTE

WASTE -> size of 1 to 1 CONSIZE
CONSIZE -> volume of 0 to -1 WASTE

WASTE -> sourced from 0 to 1 STREAM
STREAM -> source of 1 to -1 WASTE

WASTE -> specified by 0 to 1 DOTSPEC
DOTSPEC -> specifies 0 to -1 WASTE

WASTE -> storage category of 0 to 1 STORAGEECAT
STORAGEECAT -> describes 0 to -1 WASTE

WASTE -> treated in 0 to 1 BATCH
BATCH -> treats 0 to -1 WASTE

WASTE -> type of 0 to 1 SECWASTYPE
SECWASTYPE -> type 0 to -1 WASTE

WASTE -> type of 1 to 1 CONTYPE
CONTYPE -> container type of 0 to -1 WASTE

WASTE -> verified by 0 to -1 RAD VERIFICATION
RAD VERIFICATION -> performed on 1 to 1 WASTE

WASTECOMP -> UHC for 0 to -1 UHC
UHC -> kind of 1 to 1 WASTECOMP

WASTECOMP -> called from 0 to -1 SRC WASTECOMP
SRC WASTECOMP -> calling 1 to 1 WASTECOMP

WASTECOMP -> coded with 0 to -1 WC COMPATIBILITY
WC COMPATIBILITY -> compatibilities of 1 to 1 WASTECOMP

WASTECOMP -> found in 0 to -1 SOLVENT
SOLVENT -> composed of 1 to 1 WASTECOMP

WASTECOMP -> limited by 0 to 1 WA TOXICITY
WA TOXICITY -> implying limits for 0 to -1 WASTECOMP

WASTECOMP -> makes up 0 to -1 PKG WASTECOMP
PKG WASTECOMP -> made up of 1 to 1 WASTECOMP

WASTECOMP -> referenced by 0 to -1 DES WASTECOMP
DES WASTECOMP -> referencing 1 to 1 WASTECOMP

WASTECOMP -> represented by 0 to -1 UHC
UHC -> UHC of a 1 to 1 WASTECOMP

WASTECOMP -> restricted by 0 to -1 DW WASTECOMP
DW WASTECOMP -> restricting 1 to 1 WASTECOMP

WASTECOMP -> source of 0 to -1 WC REACTIVITY
WC REACTIVITY -> reaction of 1 to 1 WASTECOMP

WC COMPATIBILITY -> compatibilities of 1 to 1 WASTECOMP
WASTECOMP -> coded with 0 to -1 WC COMPATIBILITY

WC COMPATIBILITY -> properties of 1 to 1 COMPATIBILITY
COMPATIBILITY -> compatible with 0 to -1 WC COMPATIBILITY

WC REACTIVITY -> exploding when 1 to 1 REACTIVITY
 REACTIVITY -> describing reaction 0 to -1 WC REACTIVITY

WC REACTIVITY -> reaction of 1 to 1 WASTECOMP
 WASTECOMP -> source of 0 to -1 WC REACTIVITY

WSRD -> categorized by 1 to 1 STORAGECAT
 STORAGECAT -> categorizing 0 to -1 WSRD

WSRD -> management plan for 0 to -1 WASTE
 WASTE -> managed under 0 to 1 WSRD

WSRD -> profiled by 0 to -1 PROFILE
 PROFILE -> WSRd profile for 1 to 1 WSRD

WSRD -> revised 0 to -1 WSRDREV
 WSRDREV -> revisions of 1 to 1 WSRD

WSRDREV -> authored by 1 to 1 PERSON
 PERSON -> author of 0 to -1 WSRDREV

WSRDREV -> revisions of 1 to 1 WSRD
 WSRD -> revised 0 to -1 WSRDREV

3.5.1.3 SWITS RELATIONSHIPS and Associated Data

Table 6. SWITS Relationships and Associated Data

The name of the table is in **bold**.

The name of the column is in caps followed by the data type and length if applicable. The domain name is added if it applies.

BATCH TREATMENT

Description : Holds the intersection of a waste treatment batch and the treatment method performed, with the date of treatment. A given container batch may be processed multiple times, with different treatments.

BTRT_TREATMENT_DT **TIMESTAMP**

Date and time that a batch was treated with a given treatment method. Darlene Hagel's reporting requirement is to show the first treatment, if multiple treatments are entered for the same day.

CONREL

Description : This table permits the system to track the separating, repackaging, and combining of containers. It identifies the source CONTAINER occurrence and the resulting CONTAINER occurrence. Through this entity, an unlimited number of combinations and re-combinations of containers can be tracked.

CONR_DT **DATE**
Date the repackaging took place.

CONR_REL_CD **VARCHAR2(1)**
The relationship between the two containers. Must be C for Combine (the contents of several containers being placed into one), O for Overpack (a container and its contents being placed in another container), or S for Split (the contents of one container being distributed to several others).

DES DW

Description : Holds the distinct list of selected / non-selected DW numbers for a waste designation with designator comments. The table is populated when determining all D,U,P,F,K,W codes, plus WA toxic and persistence criteria.

DDW_APPL_FLAG **CHAR** **1**
Flag indicating whether the candidate dangerous waste number applies to the designation.

DDW_APPL_NOTES **VARCHAR2(255)**
Waste designator's text indicating the reason a DW number applies / does not apply to a designated waste.

DDW_TCLP_AMT **NUMBER**
Field to allow a manual input of the TCLP quantity, regardless of constituent(s) related to a particular DW number. This additional field is required to support Lab Analysis, which frequently screen for "Lead" (D008), without specifying the lead compound(s) that might have contributed to the TCLP value.

DES LDRDW

Description : Stores the summary dangerous waste numbers, subcategory codes, and waste certification codes assigned to a designation record

DLDW_VARIANCE_DT **DATE**
Applied whenever subcategory 'D' is selected for a dangerous waste number.

DES SOLVENT

Description : Table to hold the solvents (by CAS#) specified for a designation. Required for LDR determination. User will have the ability to insert or delete rows.

DSLXV_APPL_FLAG **CHAR** **1**
Flag indicating whether the candidate solvent applies to the designation.

DSLXV_APPL_NOTES **VARCHAR2(255)**

Waste designator's text indicating the reason a solvent applies / does not apply to a designated waste.

DES UHC

Description : Stores the underlying hazardous constituents associated with a designation record.

DUHC_APPL_FLAG CHAR 1

Flag indicating whether the candidate UHC applies to the designation.

DUHC_APPL_NOTES VARCHAR2(255)

Waste designator's text indicating the reason an UHC applies / does not apply to a designated waste.

DUHC_CONC NUMBER

Concentration of an underlying hazardous constituent. Used in conjunction with the applicable flag and applicable notes fields. The use of this field has been maintained for consistency with the existing SWITS usage via the U104 LDR screen.

DUHC_UNIT VARCHAR2(5)

Units of the concentration specified for an underlying hazardous constituent. Used in conjunction with the applicable flag and applicable notes fields. The usage of this field has been preserved for compatibility with the existing SWITS PKG UHC table, currently populated by the U104 LDR form.

DES WASTECOMP

Description : Input table containing the CAS#'s and concentrations picked for a "Waste to be Designated" record from the "Source" entities or by direct CAS# input.

DWC_SRC_PCT NUMBER

The percentage of a given source present in the waste designation.

DWC_WGT_PCT NUMBER

The weight % of the constituent (per source) associated with the designation.

DW LDRSUBCAT

Description : Reference list of the subcategories (one or more) which may apply to a dangerous waste number. The presence of a DW number and subcategory against a designated waste drives the selection of a waste treatment code from the LDR table, though there is no enforced relationship between the treatment codes and subcategories.

DWLS_CD VARCHAR2(1)

A code used to identify and order the optional subcategories for associated Dangerous Waste Numbers. The presence of a DW Number / Subcategory pair in a designation triggers the requirement to supply a waste treatment code from the LDR table.

DWLS_DESCR VARCHAR2(255)

Description of the subcategory.

DWLS_LOV

VARCHAR2(1)

Flag to specify whether the subcategory is available from a list-of-values.

DW WASTECOMP

Description : Join table associating one or more Dangerous Waste Codes with a Chemical Constituent (CAS).

GGC RESPONSE LOV

Description : When there are values present in this entity they will be used to limit what can be entered into the Response to the question.

GGCR_DESCR VARCHAR2(80)

GGCR_LOV VARCHAR2(1) DOMAIN: YESNO

GGCR_VALUE VARCHAR2(3)

GGRP COMMENT

Description : GEN GRP Comments is a place for generator groups to Pose questions to the generator in reference to waste packages. The actual question or comment that needs to be associated with the waste package will be saved in GEN GRP COMMENTS the response to the question/comment and association to the waste package will be stored in another entity.

GGC_COMMENT_ID NUMBER 5

GGC_LOV VARCHAR2(1) DOMAIN: YESNO

GGC_QUESTION VARCHAR2(250)

GGRP DATE

Description : GEN GRP DATE is a place for generator groups to Pose questions that have a DATE response to the generator in reference to waste packages. The actual question that needs to be associated with the waste package will be saved in GEN GRP DATE the response to the question and association to the waste package will be stored in another entity.

GGD_DATE_ID VARCHAR2(5)

GGD_LOV VARCHAR2(1) DOMAIN: YESNO

GGD_QUESTION VARCHAR2(250)

GGRP YN

Description : GEN GRP Comments is a place for generator groups to Pose questions that must be answered 'Yes' or 'No' to the generator in reference to waste packages. The actual question that needs to be associated with the waste package will be saved in GEN GRP YN the response to the question and

association to the waste package will be stored in another entity.

The questions will allow generator groups to group specific waste packages.

GGYN_LOV VARCHAR2(1) DOMAIN: YESNO

GGYN_QUESTION VARCHAR2(250)

GGYN_YN_ID VARCHAR2(5)

PKG DOTCATEGORY

Description : To be used to help Generators to determine the Department of Transportation (DOT), from the information that is contained within this table the Generator will be able to associate the proper shipping name with a Waste Package.

Notes : This entity was added for the DOT categorization. This is part of the shipment module.

PDC_ADTL_INFO VARCHAR2(1000)

PDC_DOT_ID_NUM VARCHAR2(6)

DOT ID number is a unique number associated with the proper shipping name.

PDC_EMER_RESP_GUIDE VARCHAR2(40)

PDC_EXCL_USE_SHIP_FLAG VARCHAR2(1) DOMAIN: YESNO

DOT Categorization item. Required when a Rad waste package is going to be shipped. Must be filled in before the packages can be 'Approved to Ship'. The generators may fill this information in, generally it is the Tech Services person that enters this information.

PDC_FISSILE_EXCEPTED_FLAG VARCHAR2(1) DOMAIN: YESNO

DOT Categorization item. Required when a Rad waste package is going to be shipped. Must be filled in before the packages can be 'Approved to Ship'. The generators may fill this information in, generally it is the Tech Services person that enters this information.

PDC_HAZ_CLASS VARCHAR2(1)

The primary hazard class is the Department of Transportation recognized primary grouping of materials with similar hazards associated.

PDC_HAZ_CLASS_TYPE VARCHAR2(1)

The secondary hazard class is the Department of Transportation recognized secondary grouping of materials with similar hazards associated.

PDC_HAZ_CLASS_TYPE VARCHAR2(1)

Before a waste package may be approved to ship, it must have one primary HAZ class and may have many subsidiary HAZ classes.

PDC_HRCQ_FLAG

VARCHAR2(1)

DOMAIN: YESNO

This item should default to 'N'

DOT Categorization item. Required when a Rad waste package is going to be shipped. Must be filled in before the packages can be 'Approved to Ship'. The generators may fill this information in, generally it is the Tech Services person that enters this information.

PDC_LABEL_FLAG

VARCHAR2(1)

DOMAIN: YESNO

DOT Categorization item. Required when a Rad waste package is going to be shipped. Must be filled in before the packages can be 'Approved to Ship'. The generators may fill this information in, generally it is the Tech Services person that enters this information.

PDC_LSA

VARCHAR2

There are 3 types of LSA, 1-2-3, they are mutually exclusive and may be implemented as radio buttons.

Whenever any LSA has been selected then the flag for 'EXCLUSIVE USE' must be set to 'Y'.

DOT Categorization item. Required when a Rad waste package is going to be shipped. Must be filled in before the packages can be 'Approved to Ship'. The generators may fill this information in, generally it is the Tech Services person that enters this information.

PDC_NOS_ENTRIES

VARCHAR2(100)

Not otherwise specified entries are the constituents identified from the chemical composition table that will be associated with the basic description.

PDC_PACKING_GRP

VARCHAR2

PDC_PROPER_SHIP_NAME VARCHAR2(100)

A proper shipping name is the Department of Transportation recognized shipping description for specific waste types.

PDC_RPTABLE_QTY

NUMBER 4

The waste quantity that when reached indicates that you must set the flag to associate the letters 'RQ' with the proper shipping name. RQ preceding the Proper shipping name indicates that you have a reportable quantity of a constituent from the Chem Comp table. Those constituents will be associated with the basic description. EXAMPLE: RQ "Environmentally hazardous substance, solid,, n.o.s, 9, UN 3077, III, (Adipic acid)

PDC_SCO

VARCHAR2

There are 3 types of SCO, 1-2-3, they are mutually exclusive and may be implemented as radio buttons.

DOT Categorization item. Required when a Rad waste package is going to be shipped. Must be filled in before the packages can be 'Approved to Ship'. The generators may fill this information in, generally it is the Tech Services person that enters this information.

PDC_TRANSP_INDEX_FLAG VARCHAR2(1) DOMAIN: YESNO

DOT Categorization item. Required when a Rad waste package is going to be shipped. Must be filled in before the packages can be 'Approved to Ship'. The generators may fill this information in, generally it is the Tech Services person that enters this information.

PKG DW

Description : The Dangerous Waste Numbers associated with a package of hazardous or mixed waste.

PKG GGC COMMENT

Notes : Generator group of Waste Package must match the generator group of this specific data. If the generator group is changed on the package then this data should also be deleted or compared to see if the values must move to the new generator specific data.

PGC_RESPONSE VARCHAR2(10)

PKG GGDATE

Notes : Generator group of Waste Package must match the generator group of this specific data. If the generator group is changed on the package then this data should also be deleted or compared to see if the values must move to the new generator specific data.

PGD_DT DATE

PKG GGYN

Notes : Generator group of Waste Package must match the generator group of this specific data. If the generator group is changed on the package then this data should also be deleted or compared to see if the values must move to the new generator specific data.

PGYN_YN VARCHAR2(1) DOMAIN: YESNO

PKG ISOTOPE

Description : The radioactive isotopes present in a container are identified through this table. For each isotope present, one occurrence of this entity will exist.

PISO_ALPHA_CI NUMBER 38

Alpha Curies for a particular isotope quantity.

PISO_CI_QTY NUMBER 38

The quantity of a radioactive isotope in curies.

PISO_GM_QTY NUMBER 38

The quantity of an isotope in grams. Used with the Transuranic stuff.

PISO_PE_CI NUMBER 38

Plutonium equivalent curies of listed transuranic elements (isotopes) identified in the isotope table as being measured in grams.

PISO_PU_FGE NUMBER 38

Plutonium 239 fissile gram equivalent of listed transuranic elements (isotopes) identified in the isotope table as being measured in grams.

PKG LDRDW

Description : Stores the Dangerous Waste Number / Subcategory pairs which define the applicable LDR for a waste package.

PLDW_VARIANCE_DT DATE

The date a variance was obtained for the treatment of debris.

PKG NONCONFORM

Description : Instances of non-conformance found during the various waste package review processes.

PNC_ASSIGN_CD VARCHAR2(1)

The type of reviewer who assigned the nonconformance to the waste package. May be E, O, T, R or V for Data Entry, Operations, Technical, Receipt, or Verification.

PNC_ASSIGN_DT DATE

Date that a nonconformance was assigned to a package.

PNC_DESCR VARCHAR2(255)

The detail description of the nonconformance affecting the specified package.

PNC_RESOL_DESCR VARCHAR2(255)

The detail description of how the nonconformance was resolved.

PNC_RESOL_DT DATE

The date the nonconformance was resolved.

PKG PKGINGCOMP

Description : Reference table containing waste packaging components, fillers, etc.

PPC_COMP_WGT NUMBER 8

Weight of a physical (not hazardous) component found in a specific waste container of radioactive or mixed waste. Units are kilograms.

PKG ROUTINE

Description : A type of Engineering document required for the shipment of hazardous waste

PRTN_PCT NUMBER 6

PRTN_ROUTINE VARCHAR2(1)

PKG SCHED SHIP

Description : It was suggested that an entity be created to hold information about the scheduling of shipments. Because a Waste Package can be shipped more than one time we need to have the ability to show that one shipment has happened and that the package is going to be shipped against. Therefore having the shipment flag set back to 'R' and be able to create a new truck number association and scheduled pick up date and time. The when the 'actual shipdate' has been entered then the associated '90-day' clock has been satisfied by the first shipment of the container. This would mean that only the first time a container is moved that the 'actual ship' date is recorded in the waste record.

PSCH_CNTR_POC VARCHAR2(50)

PSCH_COMMENTS VARCHAR2(500)

These are comments that can be entered by the Generator's, tech services or the transporters that pertain to any special instructions of information needed about the pickup of this waste package.

PSCH_DES_ACCEPT_DT DATE

PSCH_DES_ACCEPT_FLAG VARCHAR2(1) DOMAIN: YESNO

PSCH_DOT_PIN_INSPECT_FLAG VARCHAR2(1) DOMAIN: YESNO

PSCH_ID NUMBER 8

PSCH_INSPECT_BY_DT DATE

This is the date assigned by tech services saying when the waste package must be inspected by so that it will be ready to be shipped.

PSCH_INSPECT_COMMENTS VARCHAR2(2000) DOMAIN: COMMENTS

PSCH_LABPACK_DESCR_IND VARCHAR2(3) YES_NO_NA

PSCH_PASS_INSPECT_FLAG VARCHAR2(1) DOMAIN: YESNO

PSCH_PICKUP_TIME DATE

This is the date and time that will be assigned by the transporters saying when the specific truck will be there to pick up the specific waste package

PSCH_PIN_FILE_APPRV_DT DATE

PSCH_PIN_FILE_APPRV_FLAG VARCHAR2(1) DOMAIN: YESNO

PSCH_PROF_ACCEPT_DT DATE

PSCH_PROF_ACCEPT_FLAG VARCHAR2(1) DOMAIN: YESNO

PSCH_RECEIPT_RPT_FLAG VARCHAR2(1) DOMAIN: YESNO

PSCH_SCHED_DT DATE

This is the date that Tech Services will enter to identify to the transporter when they need this waste package picked up by. This date is based on the Package deadline date.

PSCH_SCHED_MFST_NUM VARCHAR2

This is the Manifest number that will be assigned by tech services and then the manifests will be created based on these scheduled manifest numbers.

PSCH_SHIP_DT DATE

The very first time that a container is shipped the actual ship date is moved into the Waste Package record to indicate that the Waste Package has left the generators facility and the generator is no longer responsible for it.

PSCH_SHIP_DT DATE

Need to write a procedure that when this date is filled check to see if this is the first occurrence of an actual ship date if it is then move this value into the Waste record associated with this package.

PSCH_SHIP_IND VARCHAR2(1)

Schedule shipment indicator - Indicates what point the waste package is in as it moves through the shipment process.

Anytime that the 'ship indicator' is change to Ready to ship then a new 'SCHEDULE PKG SHIP' record should be created for that package to associate a new information about the shipment of this package. This would give you the ability to schedule the movement of a Package more than one time. You could also then have the ability to find out how many times a specific package has been moved around.

PSCH_SHIP_IND_DT DATE

PSCH_SHIP_POC VARCHAR2(50)

PSCH_TRUCK_NUM VARCHAR2(6)

This is the truck number that will be assigned by the transporter to identify which truck will be picking up the specific waste package.

PSCH_TSD_ARRANGE_FLAG VARCHAR2(1) DOMAIN: YESNO

PSCH_TSD_COMMENTS VARCHAR2(2000) DOMAIN: COMMENTS

PSCH_VER_CMPLT_FLAG VARCHAR2(1) DOMAIN: YESNO

PKG SHIPITEM

Description : This entity records all shipments of a container. Combined with the FACILITY HISTORY and CONTAINER RELATIONSHIP entities, a complete history of all activity for a container

is maintained.

Notes : Name was previously SHIPHIST, Ship Item Detail describes what this entity is far better so we changed the name to make sense

PSHP_741_NUM VARCHAR2(11)

Number assigned on a DOE/NRC 741 form, Nuclear Material Transaction report. This form is generated to document all transactions and adjustments that affect the materials balance, materials usage and preparation of inventory lists for all accountable nuclear material. The DOE/NRC 741 form is the official record for nuclear material accountability.

PSHP_NMIT_NUM VARCHAR2(10)

Number assigned to the Nuclear Material Item Transfer (NMIT) form or the Shipping Receiving Report (SRR). These forms are submitted to WHC Safeguards and Security division to provide information to complete the DOE/NRC 741 form which is used to document all transactions and adjustments that affect the materials balance, material usage, and the preparation of inventory reports.

PSHP_RETURN VARCHAR2(1)

Flag showing that a package was returned to the generator and is no longer associated with the manifest.

PSHP_RSR_NUM VARCHAR2(10)

References the form number identified on the Radioactive Shipment Record (RSR). An RSR is required for all shipments of radioactive material, including radioactive waste on the Hanford site. Although this form is not required by solid waste management, its number is tracked for information only.

PKG SOLVENT

Description : This new entity relates a WASTE record to SOLVENTS. Used to answer an LDR question about solvents.

PKG UHC

Description : A table of underlying hazardous constituents contained in waste packages.

PUHC_CONC VARCHAR2(7)

The concentration of the chemical specified.

PUHC_UNIT VARCHAR2(5)

Concentration units, PPM or WT%.

PKG WASTECOMP

Description : This table identifies all chemical component names which may be used in describing hazardous and mixed waste.

PWC_PPM VARCHAR2(7)

The portion of the waste in a container, in parts per million (ppm), of a chemical component such as heavy metal, polychlorinated biphenyl, etc.

PWC_WGT**NUMBER 12**

The weight of a hazardous chemical component found in a specific waste container. Units are kilograms.

PWC_WGT_PCT**VARCHAR2(7)**

The percent by weight of a component. Relates to container Waste Weight (CON_WASTE_WGT).

PKGINGCOMP

Description : A list of all physical components that may be present in a waste container is maintained by this entity.

PC_COMP_DESCR**VARCHAR2(30)**

Description of a physical component in radioactive or mixed waste. Descriptions include paper, plastic, rags, concrete, etc.

PC_LOV**CHAR 1****PROJ SAMPLE**

No Text

PSAM_COMMENTS**VARCHAR2(2000)****DOMAIN: COMMENTS****PSAM_COMP_DT****DATE****PSAM_NAME****VARCHAR2(20)****PSAM_PKG_ID****VARCHAR2(14)****PSAM_SAMPLE_ID****VARCHAR2(15)****PSAM_TYPE****VARCHAR2(15)****RADBILLCHG**

Description : Change records of radioactive billing.

RBC_ADJUST_FLAG**VARCHAR2(1)****RBC_BILL_VOL****NUMBER 10****RBC_COMMENT****VARCHAR2(2000)****DOMAIN: COMMENTS****RBC_CONTROL_CD****VARCHAR2(5)****RBC_DNGR_FLAG****VARCHAR2(1)****DOMAIN: YESNO**

'Y' indicates that the waste is regulated under RCRA or WDOE (WAC 173), meaning it is hazardous or, as Darlene Hagel prefers, "Dangerous" waste..

RBC_GGRP_ID	VARCHAR2(8)	
RBC_HANDLING	VARCHAR2(1)	
RBC_RAD_CD	VARCHAR2(3)	
If not null, indicates the RAD waste secondary waste type. Valid values are "LLW" for Low Level Waste, "TRU" for Transuranic Waste, and "USG" for Unsegregated, NULL = Not radioactive. USG is not applicable to new items; included for legacy wastes only.		
RBC_RAD_DISP_CD	VARCHAR2(1)	
RBC_SRCE_CHRG_CD	VARCHAR2(8)	
RBC_SRCE_CMPNY_ID	VARCHAR2(4)	
RBC_SRCE_CMPNY_TYPE	VARCHAR2(3)	
RBC_STAB_REQD_FLAG	VARCHAR2(1)	DOMAIN: YESNO
RBC_TSCA_FLAG	VARCHAR2(1)	DOMAIN: YESNO
'Y' indicates that the waste is regulated under TSCA. Usually applies to PCB wastes.		
RBC_TSD_ACCEPT_DT	DATE	
RBC_WASTE_CAT	VARCHAR2(5)	

RADBILPRD

Description : The billing period for radioactive waste. Roberta Barcot (business function Charge Code Support) sets the fiscal months for rad billing. These months are developed by looking at the Hanford billing dates and negotiating with the users. Thus this separate table to record the radioactive-material billing periods.

Notes : Maintained by Roberta Barcot at this time (Charge Code Support).

RBP_BEGIN_DT	DATE	
RBP_BILL_DT	DATE	
RBP_PRD_NAME	CHAR	25

SHIP NONCONFORM

Description : Instances of non-conformances identified when inspecting waste shipments at a TSD prior to acceptance.

SHPNC_ASSIGN_CD	VARCHAR2(1)	
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The type of reviewer who assigned the nonconformance to the waste package. May be E, O, T, R or V for Data Entry, Operations, Technical, Receipt, or Verification.

SHPNC_ASSIGN_DT

DATE

The date the nonconformance was assigned to the shipment.

SHPNC_DESCR

VARCHAR2(255)

The detail description of the nonconformance affecting the specified package.

SHPNC_RESOL_DESCR

VARCHAR2(255)

The detail description of how the nonconformance was resolved.

SHPNC_RESOL_DT

DATE

The date the nonconformance was resolved.

SHIPITEM

Description : This entity identifies a specific line item within a waste shipment. One or more containers may be associated with the shipment through the Shipment History entity.

SHPITM_CELLS

VARCHAR2(15)

A list of cells in the 616 non-radioactive hazardous waste storage facility. Together with SHPITM_CELL_TXT_CD this information provides instructions for storage at 616. This field is only entered if SHPMNT_RECV_FACIL_ID is 616.

SHPITM_CELL_TEXT_CD

VARCHAR2(1)

Code indicating the text to precede a list of allowable storage cells SHPITM_CELLS. Together with SHPITM_CELLS, this information is also referred to as the handling code.

SHPITM_CNTR_COUNT

NUMBER 3

Identifies the total number of individual containers in a particular line item on a uniform hazardous waste manifest.

SHPITM_COMMENT

VARCHAR2(2000) DOMAIN: COMMENTS

Shipment Item comment.

SHPITM_CONTG_LIAB

NUMBER 8

Estimated cost for disposal of a shipment item not yet billed by contracted offsite TSD. Supports financial accrual process. Non-rad only.

SHPITM_DISP_COST

NUMBER 8

Cost to dispose of a shipment item as billed by contracted offsite TSD. Non-rad only.

SHPITM_DOT_HAZ_CLASS

VARCHAR2(20)

Hazard Class as defined in 49 CFR 172, Hazardous Materials Table; DOT hazard class tied to elements: shipment item DOT number & name. Classes include flammable liquid, corrosive material, ORME, etc.

SHPITM_DOT_ID_NUM **VARCHAR2(6)**

Identifies the proper DOT identification number for each waste. This ID is prefixed by either UN or NA. Tied to proper shipping name.

SHPITM_DOT_NAME **VARCHAR2(100)**

The proper DOT shipping name assigned to a specific waste stream as identified in the code of federal regulations.

SHPITM_ITEM_NUM **VARCHAR2(4)**

Identifies the page number and letter for a specific line on a uniform hazardous waste manifest (e.g., 1A, 1B, etc.).

SHPITM_NOS_DESCR **VARCHAR2(60)**

Text description of the two main hazardous components in the waste associated with this item. This waste can be in multiple containers. When waste is listed as Not Otherwise Specified (NOS), the two main hazardous components must be listed on the manifest. This field will be null if the shipping name SHPITM_DOT_NAME doesn't indicate NOS. See HDET_IND_NOS_DESCR.

SHPITM_PACKING_GRP **VARCHAR2(5)**

Shipment Item Packing Group

SHPITM_PROF_NUM **VARCHAR2(10)**

Waste Product Questionnaire (WPQ). A reference number for a waste stream profile as required by the off-site disposal contractor. The WPQ is the contractor's form, and subject to change depending on contract assignment.

SHPITM_QTY_UNIT **VARCHAR2(1)**

This code identifies the appropriate unit of measure for waste on a specific line on the uniform hazardous waste manifest. The codes include "G" for gallon, "P" for pounds, "T" for tons, "L" for liter, "K" for kilogram, "M" for metric ton, and "N" for cubic meter. These codes are defined in 49 CFR.

SHPITM_RQ_FLAG **VARCHAR2(1)**

Yes/No flag indicating whether or not a reportable quantity exists. The details are contained in SHPITM_DOT_NAME, but this flag is used in manifest creation to add "RQ" in a box before the proper shipping name. Yes - reportable quantity exists. No - quantity is not reportable.

SHPITM_TOT_QTY **NUMBER** **12**

The total quantity of waste described on each line of the uniform hazardous waste manifest. Containers and inner liners are not considered part of the waste when measuring or calculating the quantity of dangerous waste.

SHPITM_TSD_PROCESS **VARCHAR2(50)**

Handling codes and treatment method EPA code IDs, containment vessel and treatment. Codes include: S01C, S02T, T31T, D810, etc.

SRC WASTECOMP

Description : Stores the CAS#'s and concentrations associated with a source (MSDS, custom recipe or Lab Analysis)

SWC_WGT_PCT**NUMBER**

The Weight% (by weight) of the chemical present in a source. Per Mark Ellefson on 6/28/99, all amounts will be converted and stored as weight % in the database for ease of use, less programming.

STREAM PROFILE

Notes : The relation is between a Stream and a Profile with the PROF_ID being the pointer into the Profile table. When the Profile is revised the relationship moves to the latest revision preferably without user intervention.

TBG DW

Description : An optional list of DW numbers that applied to a generator waste (containerized or uncontainerized) prior to treatment.

TBGWASTE

Description : Table to record the source, quantity, treatment type, and waste stream code for uncontainerized wastes treated by a generator prior to shipment. The data is used in the Annual Dangerous Waste Report (ADWR).

TBG_CERCLA_FLAG VARCHAR2(1) DOMAIN: YESNO

TBG_DESIG_CD CHAR

Waste designation code ('DW' / 'EHW'). Can be copied from a package in the DANGDETAIL table.

TBG_DNGR_FLAG VARCHAR2(1) DOMAIN: YESNO

TBG_ID NUMBER 8

Treated waste ID number. Number may match a PIN / CIN from the WASTE table, but is not required to do so.

TBG_LOGBOOK_ID CHAR

Optional number used by generators to track a waste container.

TBG_QTY NUMBER

Quantity of waste treated by a treatment code

TBG_RAD_CD VARCHAR2(3)

TBG_TREATMENT_DT TIMESTAMP

Date that a treatment was applied to a waste. A waste can be treated multiple times by duplicating the record.

TBG_TSCA_FLAG VARCHAR2(1) DOMAIN: YESNO

TBG_WASTE_DESCR CHAR 2000

Treated waste description. May be copied from a package in the WASTE table.

UPLDPKG DW

Description : Temporary table used to load Dangerous Waste Number information from an Engineering database (in Paradox) into SWITS.

UPDW_LANDBAN VARCHAR2(1)

UPDW_NUM VARCHAR2(4)

UPLDPKG WASTECOMP

Description : Temporary table used to load hazardous chemical component information from an Engineering database (in Paradox) into SWITS.

UPWC_COMP_ID VARCHAR2(12)

UPWC_WGT_PCT VARCHAR2(7)

VER METHOD

Description : This is the detail of what verifications need to be performed on a container.

VERM_COMMENTS VARCHAR2(2000) DOMAIN: COMMENTS

This is a comment on the waste verification. It usually is an explanation of why the item failed verification.

VERM_DONE_DT DATE

The date that this verification was performed.

VERM_METHOD VARCHAR2(40)

The type of verification to be performed.

The domain includes Surveillance, Physical Screening, Chemical Screening.

VERM_QA_RECORD_ID CHAR 14

A pointer to the QA record for this verification method for a package.

The QA record is not held in SWITS.

May be null.

3.5.2 OPERATIONS

System boot, backup and recovery will normally be done by the SWITS system administrator.

3.5.3 SITE ADAPTATION

No special site adaptation requirements have been identified for the SWITS.

3.5.4 SCHEDULING

Processes in SWITS are event-driven - in other words, SWITS responds to messages sent by other systems or users.

3.5.5 RELIABILITY AND RECOVERY

SWITS unavailability will not exceed 4 hours during working hours at a time. When the SWITS system is down the WRAP facility cannot process any data. Thus any SWITS problems affect WRAP.

3.5.6 AUDIT

The information in an audit trail will be retrievable. It will be archived and restored like the other files in the database.

3.5.7 PRIORITIES

No special preceding, succeeding or interface production applications were identified.

3.5.8 TRANSFERABILITY

No transferability requirements have been identified.

3.5.9 CONVERSION

The existing SWITS data must be converted to the new tables and formats. The *SWITS C/S Conversion Database Conversion Plan, HNF-5861*, has details.

3.5.10 TESTING AND ACCEPTANCE CRITERIA

Test procedures will be written and maintained as internal documents to SWITS according to the *SWITS C/S Conversion Test Plan, HNF-5862*. The test procedures will contain the acceptance criteria derived from this document.

3.5.11 DOCUMENTATION

The *SWITS Client-Server Conversion SPMP, HNF-2357*, contains a list of the documents to be produced.

3.5.12 TRAINING

The customer will prepare a *SWITS C/S Conversion Training Plan, HNF-5867*, which will provide a guide for training on the SWITS and provide and maintain the User Guide.

3.5.13 SECURITY AND PRIVACY

The manager of the system users will have the authority to add, change, or delete user access to the system. Once the manager has approved the change, the system administrator will be empowered to make the necessary changes.

The system administrator will work with the Computer Protection Program Manager (CPPM) to assure the integrity of the system.

There is no classified or proprietary information in the system.

The user has the responsibility of keeping unauthorized persons from using a workstation while the user is logged in.

4. REFERENCES

The following documents are referenced within this document:

Computer Software Quality Assurance Requirements (HNF-PRO-309)
Hanford Site Solid Waste Acceptance Criteria (HNF-EP-0063)
PHMC Engineering Requirements (HNF-PRO-1819)
SWITS C/S Conversion Bar Code Requirements Specification (HNF-5866)
SWITS C/S Conversion Database Conversion Plan (HNF-5861)
SWITS C/S Conversion Test Plan (HNF-5862)
SWITS C/S Conversion Training Plan (HNF-5867)
SWITS Client-Server Conversion SPMP (HNF-2357)

Additional regulatory URLs are listed in Section 2.4.1.