

WIPP Waste Information System User's Manual for Use by Shippers/Generators WWIS Version 4.6



Approved by: *[Signature]*
Dated: *10/07/01*

Original Signature on file

**WIPP Waste Information System User's Manual for Use by Shippers/Generators
DOE/CAO 97-2273, Rev. 3**

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1.0 INTRODUCTION

The WIPP Waste Information System (WWIS) database is a computerized data management system used by the WIPP to gather, store, and process information pertaining to TRU waste destined for or disposed of at the WIPP. The WWIS supports those organizations who have responsibility for managing TRU waste by collecting information into one source and ensuring that waste container data is complete and in a uniform format so it can be easily evaluated.

The WWIS is specified and required by Environmental Protection Agency (EPA) Compliance Certification for the Waste Isolation Pilot Plant (Title 40, Code of Federal Regulations [CFR], Subparts 191/194); the Hazardous Waste Facility Permit (hereinafter referred to as the Permit); and the Waste Acceptance Criteria (DOE/WIPP-069). Data received by the WIPP for waste acceptance purposes is used to determine compliance with the Permit and EPA Compliance Certification requirements. The data management, review, and approval processes are critical to ensure WIPP's regulatory compliance.

The WWIS is an on-line database system used to:

- C Record waste container characterization and certification data supplied by transuranic (TRU) waste shipper/generator/certifier site (as required by the WIPP Waste Acceptance Criteria (WAC) and the Permit) for acceptance for disposal at WIPP.
- C Produce reports that provide waste container characterization data for use in review of Waste Stream Profile Forms (WSPF).
- C Provide computerized edit and limit checks regarding WIPP acceptance of container characterization and certification data supplied by the shipper/generator/certifier sites.
- C Communicate via e-mail, the approval/rejection status of characterization and certification data and the approval/rejection status of proposed shipments to the shipper/generator/certifier.
- C Record shipment configuration details from the shipper/generator/certifier for containers that have received WIPP approval.
- C Provide a hold and approval point for the WIPP Data Administrators (DAs) to approve or reject any proposed shipment.
- C Provide a Shipment Summary Report used by WIPP transportation engineers (TEs) and Waste Handling (WH) personnel to verify each incoming shipment against the information listed on the Hazardous Waste Manifest of Bill of Lading

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and to verify that the waste containers received are those preapproved for shipment and disposal.

- C Record the disposal location of the containers when they are placed in the underground Hazardous Waste Disposal Units.
- C Automatically record any deletions of WWIS data, record changes made to the Administrative Tables, and provide a Change Log Report when requested.
- C Provide required reports, which are entered into the facility operating record and maintained in accordance with Records Inventory and Disposition Schedule (RIDS).

The above functions require interaction between several WIPP organizations, shipper/generator sites, and others, such as internal and external review/oversight groups. This manual provides the information needed by TRU waste shippers/generators to perform tasks associated with transmittal of waste container characterization, certification, and shipment information to the WIPP. The WIPP will not accept any waste container shipments for disposal if the waste container information has not been correctly submitted to the WWIS and approved for shipment by a WWIS DA.

Waste container information received by the WWIS is subject to both electronic edit/limit checks and manual inspection by WIPP personnel to ensure that the data representing the waste containers are in compliance with the WIPP Waste Acceptance Criteria (WAC) and the Permit. WIPP personnel make entries to the WWIS after waste containers are received at the WIPP to record information concerning the shipment arrival and the disposal location of each container.

The WWIS is a client/server application. The client application runs on personal computers using Windows 95 or Windows NT, and the database runs on a UNIX® server. The client software is served by an application server to facilitate dissemination and configuration control of client software. The WWIS application has been developed using the Oracle Procedure Language/Structured Query Language (PL/SQL), Oracle Designer/2000, and Developer/2000 tool sets which utilize the Computer-Aided Software Engineering (CASE) methodology in design and implementation of the application. The WWIS uses the traditional Windows user interface, so operation will be largely familiar to experienced computer users. The program is designed so that each shipper/generator/certifier site has read/write access to only the container and shipping data applicable to that site. The program has a standard menu bar interface with pull-down menus.

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1.1 User Characteristics

WWIS users come from a technically diverse population. Many different types of users interact with WWIS during the operation and maintenance phase of the software life cycle. Users vary in technical expertise, educational levels, and experience. Users are, however, knowledgeable in the business activities of waste management and use computer systems to perform their job functions. Categories of WWIS users are detailed below. These categories are not mutually exclusive.

Shipper/Generator/Certifier - Originates and transfers waste container data to the WIPP through the WWIS.

WIPP Operations - Uses the system for inventory purposes.

Remote Site Query Only - Use WWIS for data queries.

DA - Manages the WWIS, including input of information to the Administrative Tables and approval of shipper/generator site waste data input; approves waste container and shipment data from shipper/generator.

Database Administrator (DBA) - Provides system maintenance, backup, and recovery.

Information Systems Security Manager - Provides WWIS System security supervision.

System Administrator - Maintains the WWIS server, operating system, and access to the WIPPNET.

Read Only Users - Access the WWIS for information about waste containers and shipments.

WIPP Query - Provides access to information about waste containers and shipments.

Some users may need basic system indoctrination to operate the WWIS properly. The WWIS Cognizant Engineer, DBA, and DA will be available to assist users who do not have the necessary tools or expertise to properly utilize the system or obtain data/reports for special requests.

2.0 **WWIS PROGRAM DESIGN**

All shipper/generator/certifier sites planning to ship TRU mixed waste to WIPP must supply the required data to the WWIS. The WWIS DAs use the WWIS to verify that the supplied data meet the edit and limit checks prior to the shipment of any TRU mixed waste to WIPP. By definition, all data entered into the WWIS has undergone the appropriate Quality Assurance (QA) checks by designated site personnel prior to submittal for approval at

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WIPP. If any of the supplied data fails to meet the requirements of the edit and limit checks, the WWIS automatically notifies the individual who supplied the data via an appropriate error message. The shipper/generator/certifier site is required to correct the discrepancy with the waste or the waste data and re-transmit the corrected data. A DA reviews data reported for each container of each shipment prior to providing notification to the shipping shipper/generator/certifier site that the shipment is acceptable.

The WWIS Data Change Log requires a reason for the change from the DA prior to accepting the change. The data change information, the user ID of the authorized DA making the change, and the date of the change will be recorded in the data change log automatically. The data change log is subject to internal and external audits and provides an auditable trail for all changes made to previously approved data.

2.1 Modular Design

The WWIS is designed with various modules to provide the data control required for container acceptance, shipping, and disposal processes. These modules are represented as pull-down menus on the program menu bar. Some program features are related only to WIPP functions and shipper/generators are not allowed access to some of these modules and menu features. Modules that are used by shipper/generator/certifiers are titled:

C	Admin
C	Characterization
C	Certification
C	Shipping
C	Query

As the container data progresses through the data input and approval stages, the WIPP DA will enter characterization module data approvals, waste stream profile approvals, certification module data approvals, shipping module data approvals, etc., into the database effectively moving the data from module to module. The major features of these modules are described in the following sections.

2.1.1 Administration Module

The Administration (Admin) module allows the user to preview reference data reports on screen or to print them to be used as the comparison data set for edit/limit checks. All data submitted to the WWIS, whether manually or electronically, that is subject to edit/limit checks, will not be accepted by the WWIS unless a corresponding entry is found in the applicable reference data table that exactly matches the data submitted. Prior to entering data into the certification module, the administrative reference tables must be updated by the DA. The user shall notify a DA when changes are required. Typically, the following tables must be reviewed for update prior to submittal of data for each waste stream: WSPF Number, Hazardous Waste Codes by site, Shipping Category, Assay Methods by

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site, Assay Methods, Analytes, and Characterization Methods by site. The WIPP DA must input information into the WWIS Administrative Reference Tables to support programmed edit/limit checks for the information supplied by the user.

In the manual data entry mode, the reference data for applicable fields is provided to users interactively, i.e. in the event an invalid entry is made, a popup list of valid values appears from which the user may make a selection. In the electronic data entry mode, the option to make corrections to data interactively does not exist. Therefore, the user should ensure that prior to submitting any data electronically, all data have identical entries in the corresponding reference data tables.

The reference data is accessible to a user through the use of look-up tables known as "lists of values" (LOV) when the data is input manually to the WWIS. However for an electronic data transfer to be accepted, the user must ensure that each of the data fields to be transferred exactly match the corresponding information in the WWIS reference data tables.

The user should contact and work with the WIPP DA to add needed site-specific reference data to the Administrative Reference Tables to support the information that will be submitted to the WWIS.

2.1.2 Characterization Module

The Permit requires each generator to submit Waste Stream Profile Forms (WSPFs) for each waste stream to be sent to the WIPP. The WSPFs provide summary information about each waste stream. The WWIS Characterization module is designed to accept the container specific data that is the basis for the summary information included on the WSPF. This data is subjected to electronic edit/limit checks during the submittal process.

Container data is submitted through the Characterization module only if the WSPF for the associated waste stream has not yet been approved by the WIPP. Once the WSPF is approved, additional waste container information must be submitted through the Certification module, because after WSPF approval, the WWIS will no longer allow submittal of data into the Characterization module for that WSPF.

Since waste stream profile information is collated against a waste stream profile number, the user must provide the WIPP DA with a WSPF number prior to submitting Characterization module data to the WWIS. The WSPF Administrative table is then configured to recognize the WSPF numbers. The WWIS will not accept any container data until the WIPP DA has entered the associated WSPF number(s) into the administrative table.

Once a WSPF is approved, the WIPP DA enters the approval date into the WWIS reference table. The WWIS program uses the WSPF approval status information to "determine" which module (Characterization or Certification) will accept the container

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information. Records entered into the Characterization module are subjected to edit/limit checks and if accepted by the program are automatically assigned the status, "Pending Characterization Data Approval".

The WIPP DA must review the container data, utilizing the Review/Approval screen. If acceptable, the DA will approve the Characterization data records by making an entry into the WWIS that changes the record status to "Characterization Data Approved By WIPP." If the record is rejected, it is deleted from the database. The WWIS Change Log does not record the rejection of the (Characterization) data since the record was never formally accepted by the WIPP.

The Characterization module also allows the user to view or print:

- C A Waste Container Data Report showing container data input to the Characterization module.
- C A Container Approval/Rejection Report showing the review/approval status of waste containers.
- C A report showing the acceptance or rejection status of records submitted using the electronic transfer option of the WWIS. The report includes error messages explaining the reason(s) for record rejections.

2.1.3 Certification Module

The Certification module is designed to allow two different data input functions:

- C Input of additional fields of information for container records that were originated in the Characterization module.
- C Input of all waste container data for waste containers belonging to a waste stream profile form number that already has been approved.

The WSPF must be approved before the WWIS Certification module will accept any data associated with that profile form number. For example, the WWIS will accept required data for a container which was initially entered in the Characterization module only if the WSPF has been approved, as indicated by entry of the approval date in the WWIS administrative reference tables by the WIPP DA.

Records entered into the Certification module are subjected to edit/limit checks and if accepted by the program are automatically given a status, "Pending Certification Data Approval".

As required in the Characterization module, the WIPP DA must review the container certification data, utilizing the Review/Approval screen. Once the WIPP DA accepts the

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Certification data, the record status is automatically changed to "Certification Data Approved By WIPP". If the record is rejected, the program will cue the DA to input the reason for the rejection. At this point the record is deleted from the database and a copy of the original record and the reason for the rejection become a permanent record in the Change Log. The user who supplied the data is automatically notified by e-mail when a container is rejected.

The Certification module also allows the user to view or print:

- C A Waste Container Data Report showing container data input to the Certification module.
- C A Container Approval/Rejection Report showing the review/approval status of waste containers.
- C A report showing the acceptance or rejection status of records submitted using the electronic transfer option of the WWIS. The report includes error messages explaining the reason(s) for record rejections.

2.1.4 Shipping Module

After the DA approves the Certification records, the user is able to "build" a shipment from containers with a status of "Certification Data Approved By WIPP" and submit the proposed waste shipment details to the WIPP for approval. At this point, the status of the containers automatically changes from "Certification Data Approved By WIPP" to "Pending Shipment Data Approval By WIPP." The Shipping module is designed to provide limited edit/limit checks for proposed shipment details and has seven data fields that can be left blank up to the time of the shipment, but which must be completed before the shipment is physically sent to the WIPP. These fields are:

- C Shipment send date
- C Packaging Number
- C Outer containment assembly (OCA) lid number
- C Inner containment vessel (ICV) closure date
- C Radiation dose rate at surface (contact)
- C Radiation dose rate at 1m
- C Radiation dose rate at 2m

The DA reviews the proposed shipment and utilizes the Review/Approval feature to approve records that pass the edit/limit checks. Once the DA approves a proposed shipment, the status of that submittal is automatically changed from "Pending Shipment Data Approval By WIPP" to "Shipment Data Approved By WIPP".

The Shipping module has an input screen feature which is designed to allow the user to input required information for any dunnage containers used in the shipment.

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The Shipping module also allows the user to view or print:

- C A Shipment Summary Report showing shipment data input to the Shipment module.
- C A report showing the acceptance/rejection status for electronic transfer information and the reasons for any proposed shipment rejections by shipment number.
- C A Shipment Isotope Summary Report which consists of the shipment number, shipment date, isotopes and isotope mass for Nuclear Materials Management and Safeguard System (NMMSS).

2.1.5 Query Module

A Query module is provided to allow users to access WWIS records in a read-only mode. Container, shipment, and waste emplacement (disposal) information may be viewed on screen or printed. The query module is designed so that shippers/generators can only access records applicable to their sites. The container status codes that are available for checking are:

- C Pre-submittal To Characterization Data Approval
- C Pending Characterization Data Approval By WIPP
- C Characterization Data Approved By WIPP
- C Pre-submittal To Certification Data Approval By WIPP
- C Pending Certification Data Approval By WIPP
- C Certification Data Approved by WIPP
- C Pending Shipment Data Approval By WIPP
- C Shipment Data Approved By WIPP
- C Shipment Has Been Received At WIPP
- C Container Emplaced At WIPP
- C WIPP Site Derived Waste

The Query module allows the user to toggle between screens that show container, shipment, and emplacement information associated with a waste container.

Queries may also be performed on specific container and shipment data input to the modules. The Data Status Code is representative of the approval status of the data in the applicable module. For example, data input into the certification module that has not yet been approved by the DA will display the "Pending Certification Approval by WIPP" status; after approval by the DA, it will display the "Certification Data Approval by WIPP."

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2.2 Methods of Data Input

The user may input data to the WWIS by either manual/interactive input or by electronic transfer. Data submitted by electronic transfer must be formatted to be consistent with the WWIS data structures. Regardless of the method of input used, it is the user's responsibility to ensure that site fields agree with WWIS records. The edit/limit checks imposed on the data in the WWIS are the same for either method of input. If a container data entry is rejected because the record did not pass edit/limit checks, a report is generated and the reason(s) for the data rejection given so that the user can correct and re-submit the data entry.

2.3 User Access and Data Control

Prior to obtaining access to the WWIS, the shipper/generator site must have a WWIS client computer meeting the following recommended minimum requirements. (This computer is to be supplied by the shipper/generator site):

- C Pentium-class IBM-compatible personal computer
- C 64 MB memory
- C 100 MB free hard disk space
- C 4X CD-ROM drive
- C SVGA monitor and video card
- C Microsoft-compatible mouse
- C Windows 95, 98, 2000 and/or NT operating system
- C Oracle Designer/2000 and/or Developer/2000 Runtime licence
- C DOE Business Network access (or 28.8Kbps modem and WIPP-supplied SecureNet key)
- C WWIS client software (supplied by the WIPP)

A prospective user must submit the following information via e-mail or fax to the WIPP DA, DBA, or Cognizant Engineer: name, mailing address, e-mail address, telephone number, fax number, organization/title and reason for access. The DA will review and approve/reject the request. If approved, the DA then assigns and records a Username and Password.

When a WWIS User logs on to the WWIS, a dialog box warning message is displayed stating, "This is a private system not for public use. No classified or sensitive unclassified information such as UCNI, NNPI, FOUO, or similar information is to be placed on this system."

When assigning the Username and Password, the WIPP DA assigns an access authorization level that provides pre-determined read/write privileges to the WWIS. The user has the privileges discussed above but is denied write access to the administrative reference tables.

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The WWIS is designed with program features to ensure that only the user can input data relating to characterization, certification, and shipping details of the shipper/generator's waste. The WWIS software prohibits changing data once it has been submitted by the . Even the WIPP DA has no capability to change the input data records. Changing a record is accomplished by the DA deleting the record from the database and the user resubmitting it.

The WIPP DA may delete records from the active database for two reasons: (1) the record is reviewed by the WIPP DA and found to be unacceptable based on reasons not included in the computerized edit/limit checks or (2) the user requests that the record be deleted so it may be modified and re-submitted through the normal data-entry procedure.

After requesting the deletion of a record, the user may re-submit the revised container information through the normal WWIS input process at which time it must undergo the acceptance process once again. The purpose of this process is to ensure that waste container and shipping data contained in the WWIS are input entirely by the user. The user is required to ensure that any changes made to data in the WWIS are also reflected in the user's own local waste tracking system and/or documentation.

2.4 WIPP Notification of Acceptance or Rejection of Generator Submittals

The WWIS automatically generates and sends an electronic mail message to the shipper/generator each time a container or shipment record is reviewed and accepted or rejected. The message is sent to the e-mail address supplied by the shipper/generator when access to the WWIS is initially requested. The shipper/generator may then print a "Container Approval/Rejection Report" for specifics regarding the data transaction.

2.5 WIPP Input To The WWIS

Upon physical receipt of the waste at the WIPP, Waste Handling Operations personnel input additional information into the WWIS including:

- C Shipment receipt date
- C Container disposal/storage date and location information

3.0 OBTAINING ACCESS TO THE WWIS

Each prospective user must contact the WWIS DA. The DA will assign a Username and Password to each approved user of the WWIS. Appropriate read/write privileges on the WWIS will be assigned to the user at that time. Prior to obtaining WWIS access approval, the user must have attended a WWIS Orientation session and/or any site-mandated WWIS training.

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3.1 Requirements For Data Transfer To The WWIS

Each user wishing to use the WWIS must have an IBM-compatible personal computer (PC) loaded with Oracle Developer/2000 Runtime (Forms and Reports) which meets the requirements set forth in Section 2.3. The client machine must also be configured using SQL*Net to communicate with the WWIS. The WIPP will provide approved users with the necessary client software and assist sites in configuring their machines for this communication.

Users who plan to make electronic data transfers to the WWIS are responsible for loading the data into temporary data tables. The data tables must be compatible with the WWIS data file format and structure. The structure of these temporary tables is set forth in Section 4.3.

3.2 Access Testing

Each user must perform a test connection to the WWIS prior to submitting "real" data. During the test phase, the user transmits data to the WIPP to ensure that the data is successfully and accurately transmitted. Testing also provides the user with a chance to become familiar with WWIS operation. The data transmitted using the "Test Instance" will NOT become a permanent record in the WWIS database.

Testing may be re-performed periodically. Generally, this will occur at the following times: (1) following significant modifications to the generator site or the WWIS hardware/software and/or database table structures, (2) when deemed necessary by WIPP personnel, (3) to ensure that the electronic data entry temporary data tables are being populated properly by the shipper/generator sites, and (4) to ensure that manual data entry functions are operating correctly so that the data continues to be received and processed correctly by the WWIS.

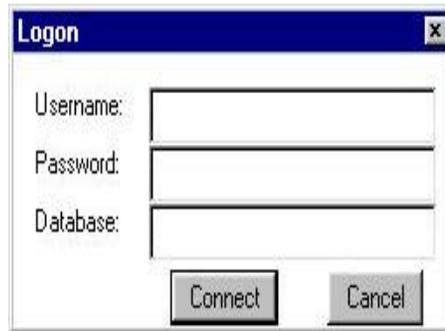
It is highly recommended that the sites maintain backup systems and alternate communication links for critical WWIS access.

4.0 PROCEDURES

4.1 Logging Into The WWIS

4.1.1 Verify that the current version of the client software is loaded into the computer and operating properly. Initiate the WWIS program by double-clicking the WWIS shortcut. The WWIS Logon Box will appear. At the Logon Box, input the Username, Password, and Database codes assigned by the WIPP DA, and select the connect button.

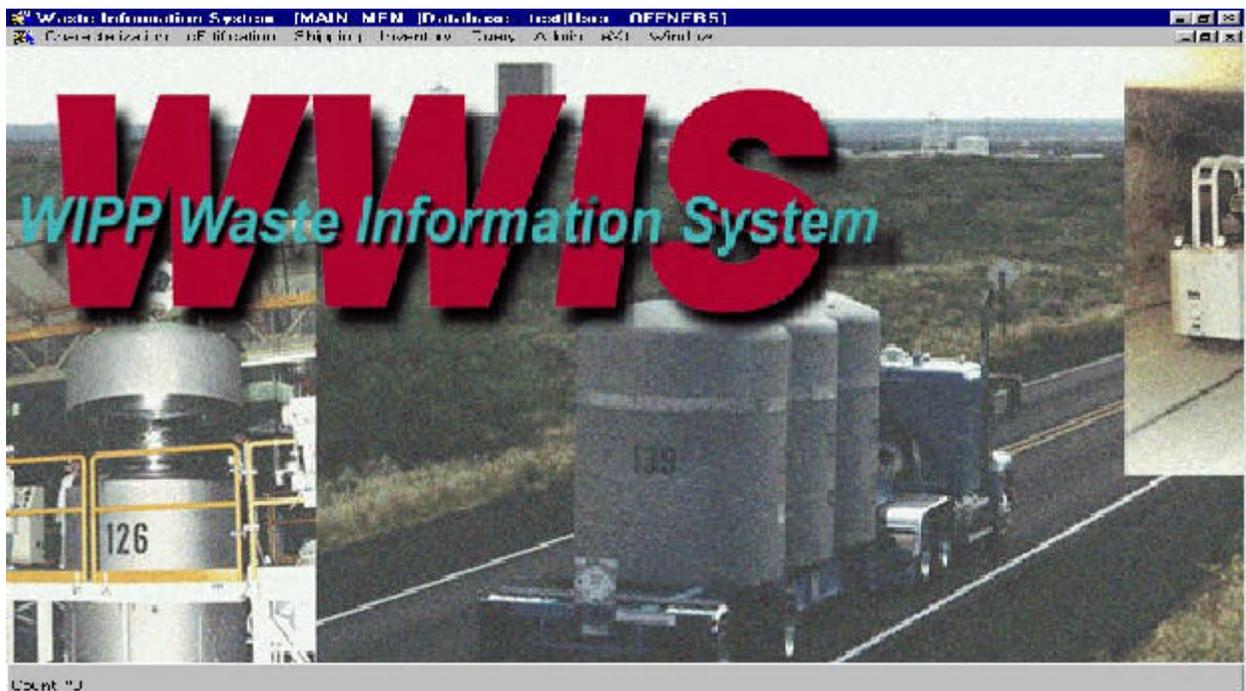
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A screenshot of a Windows-style dialog box titled "Logon". It contains three input fields: "Username:", "Password:", and "Database:". Below the fields are two buttons: "Connect" and "Cancel".

- 4.1.2 The WWIS Main Menu Screen and Security Warning dialog box will appear, as shown below. Select Accept Button when the Security Warning dialog box appears if you agree to the conditions stated in the security dialog box (if you select the Don't Accept Button you will be logged off of the WWIS.) These codes may be found on the approved WWIS Access Request Form returned to the user after the application was approved.

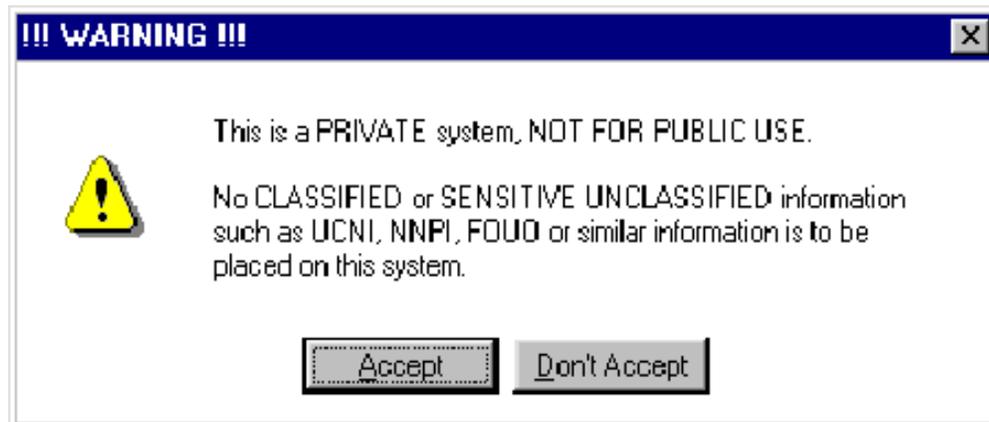
WWIS Main Menu Screen



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- 4.1.3 When the user selects the Accept Button, the initial WWIS menu screen will become available. The user will use this screen to navigate through the various program modules.
- 4.1.4 Upon login, the main application prompts the user for a password change if either of the following conditions are true:
 - 4.1.4.1 When the WIPP initially establishes the user account, the password should be changed to a unique password known only to the user to assure that adequate security is maintained for the WWIS.
 - 4.1.4.2 The password has not been changed in 60 days - The WWIS will check to see when the password was last changed. If the period of time exceeds 60 days, the user will be encouraged to change the password.

The password may also be changed at any time from the main menu by holding down the Ctrl key and striking the (lowercase) "p" key. The change password dialog box will then appear and the user will be prompted to enter the new password twice for verification.



4.2 Manual Entry Of Container Records

- 4.2.1 To input container records, go to the menu bar and select the applicable menu (Characterization or Certification).
- 4.2.2 Select the data entry option for the module selected (Characterization Data Entry or Certification Data Entry). The first Waste Container data entry screen will be displayed. (Note: The screens are different for the two modules.)

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Characterization Module Data Entry Screen

Waste Container Characterization Data

Shipper Site ID:

Waste Stream Profile:

Container Number:

Container Type:

WAC Rev #:

Waste Handling Code:

Waste Type Code:

Waste Stream BIR ID:

Waste Stream MWIR ID:

General Bill:

IDC Code:

Master Code:

Truck Code:

True Alpha Act Conc (Dig):

True Alpha Act Conc Linert (Dig):

PU239 Fiss Gm Eq (FGE):

PU239 Fiss Gm Eq Linert (FGE):

Decay Heat (watts):

Decay Heat Linert (watts):

Layers Of Packaging:

Linert Type:

Identification code for site - (list of values available)
Count *) (list)

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Certification Module Data Entry Screen

The screenshot shows a software window titled "WIS [Certification Data Entry: FM0470 Database: test] User: OFFNFRS". The window contains a form titled "Waste Container Certification Data". The form is organized into several sections with input fields:

- Top Section:**
 - Waste Stream ID: []
 - Waste Stream Name: []
 - Container Number: []
 - Shipper Site ID: []
 - Container Type: []
- WAC Information:**
 - WAC Rev #: []
 - WAC Ex. #: []
 - Waste Handling Code: []
 - Waste Type Code: []
 - Waste Stream OR ID: []
 - Waste Stream MW R ID: []
 - Cert Site: []
 - Co. L Date: []
- Generator Information:**
 - Generator Site ID: []
 - ITC Code: []
 - Matrix Code: []
 - Trucon Code: []
 - Shipping Category: []
- Tru Alpha Act (Ci) Information:**
 - Tru Alpha Act Inert (Ci): []
 - Tru Alpha Act Conc (Ug/L): []
 - Tru Alpha Act Conc Inert (Ug/L): []
 - Pu239 Plus 23m Lc (f/g/L): []
- Physical Properties:**
 - Delay Heat (watts): []
 - Delay Heat Uncert (watts): []
 - Layers Of Packaging: []
 - Fill Factor %: []
 - Liner Type: []
 - Liner Punched
 - Reb Cont (ppm): []
- Filter Information:**
 - Container Date: []
 - Vent Date: []
 - Filter Install Date: []
 - Filter Model Number: []
 - Aspiration Method ID: []
 - Has Hept Rate (molecules): []
 - Hydrogen Molecule Gas Rate (molecules): []
 - Gas Cont Comp Data: []
- Weight Information:**
 - Gross Weight (kg): []
 - Gross Weight Uncert (kg): []
 - Waste Weight (kg): []
- Bottom Section:**
 - Alpha Bk Cont (dpm/100 cm²): []
 - Delta Gamma Surf Cont (dpm/100 cm²): []
 - Neutron Dose Rate (mrem/hr): []
 - Gamma Dose Rate (mrem/hr): []

At the bottom of the window, there is a message bar that reads: "Identify code to site - list of values available" and "Data Entry" with a list icon.

- 4.2.3 Begin by entering container information in the screen provided. Note that the message bar at the bottom of the input screen will indicate if a List of Values (LOV) is available for the field. When available, the LOV may be accessed by selecting the List button on the button bar at the top of the screen or by simply double-clicking the data entry field. If available, the applicable LOV will automatically appear any time an invalid entry is made, thereby allowing the user to select from among the valid reference entries. When the entry is complete,

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press the Tab key or the Enter key to move to the next field. Selecting the List button while the cursor is on a Date-type field will pop up a scrollable monthly calendar from which a date may be selected for entry in the field.

- 4.2.4 Continue entry to each field until reaching the last entry on the screen. You may hit <Shift><Tab> to move the cursor backward to a previously entered field if it is necessary to change any entries.
- 4.2.5 Any time after the first four fields (Shipper Site ID, Waste Stream Profile, Container Number, and Container Type) have been entered, the container record may be saved by selecting the Save button (floppy disk icon) at the left end of the button bar. A previously saved (but not yet submitted) container record may then be queried up at any time to continue data entry using the General Query Techniques described in Section 4.7.
- 4.2.6 Proceed to the next data entry screen by sequentially selecting the buttons for each screen located on the right side of the menu bar as shown below.



When the mouse pointer is allowed to rest on each button, the name of the associated entry screen will be displayed. Complete the information in the same fashion as done in the first screen. (Note: There are a total of eight screens - Waste Container, Radionuclides, Material Parameters, Assay Methods, Characterization Methods, Hazardous Codes, Samples and Amounts, and Comments. The Hazardous Codes screen is not applicable if the waste type code is TRU (as opposed to MTRU). Input to the Comment Screen is optional, but all others must be completed before the WWIS will accept the container record, when it is submitted.

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Samples and Amounts Data Entry Screen

Waste Container Certification Data

Shipper Site ID:

Waste Stream Profile:

Container Number:

Container Type:

Waste Container Sample Data

Sample ID	Sample Type	Layer No. Sampled	Date Sampled
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Waste Container Sample Amount Data

Analyte
<input type="text"/>

Method ID:

Concentration:

Volume %:

mg/kg:

ppm:

Date Analyzed:

Detectable Flag: B D E U NA

Sample Identification Number
Count *3

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4.3 Electronic Entry Of Container Records

As explained in Section 2.1, data may be entered into the WWIS in different stages, depending on whether the data is initiated in the Characterization modules or in the Certification module.

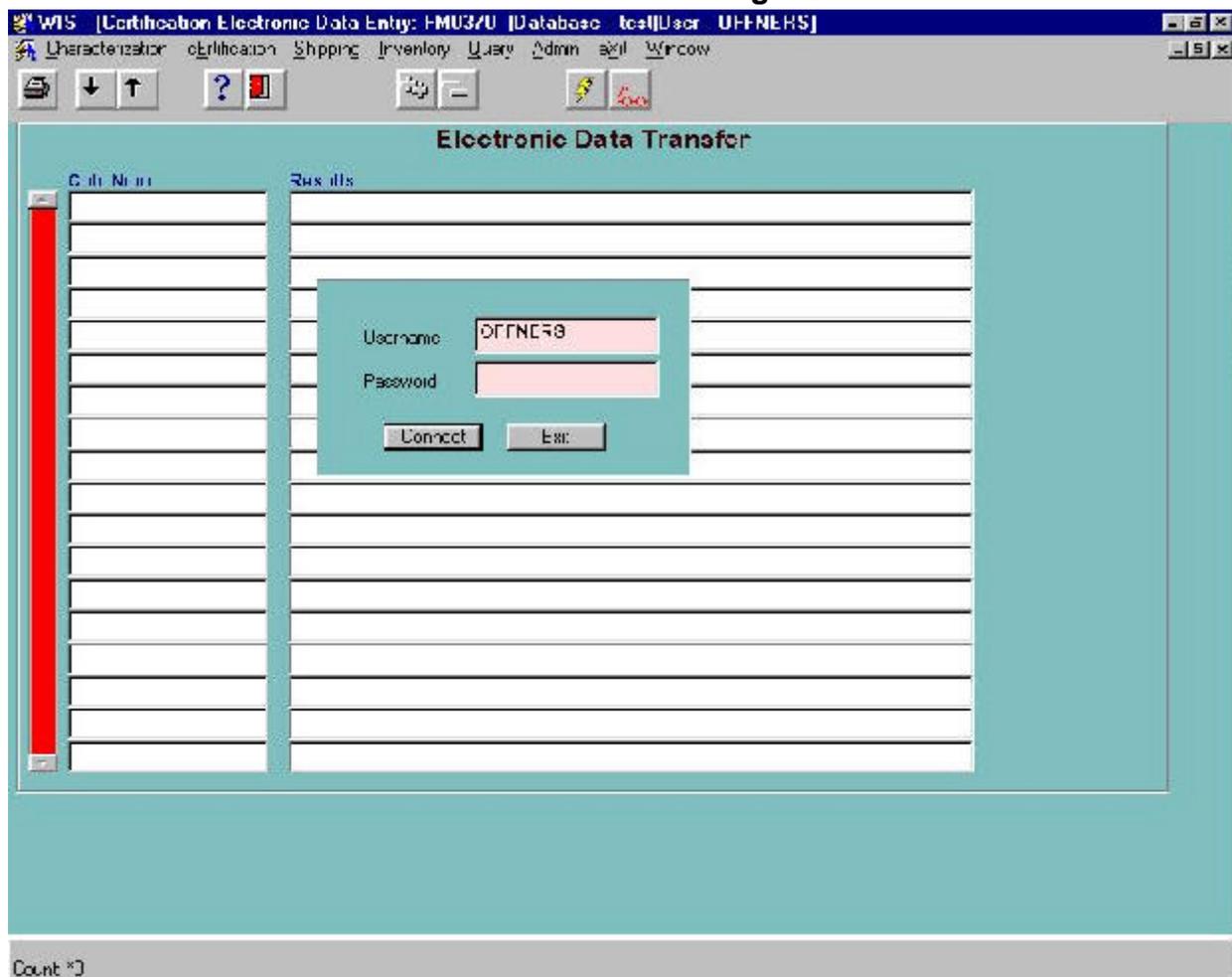
To enter data electronically, the shipper/generator must populate temporary files with waste container data which are formatted to be compatible with the WWIS data file structures. This allows use of the programmed electronic data entry feature of the WWIS. A description of the required electronic data entry fields and their respective formats for both the Characterization module and the Certification module is given in Attachment 1. Attachment 1 identifies nine tables that must be transmitted to the WIPP for each waste container to be considered for receipt.

The same nine temporary tables are used for data entry in the Characterization module and the Certification module. The table columns labeled "Charz Data" and "Cert Data" specify which fields must have an entry for an electronic transfer to be successfully completed under the respective Characterization or Certification module. Fields that are required to have an entry in the temporary transfer table have a "not null" designation in the respective column.

- 4.3.1 To initiate the electronic data transfer of records resident on the client server, go to the WWIS main menu and select the applicable menu (Characterization or Certification).
- 4.3.2 Select the data transfer option of the module (Characterization Data Transfer or Certification Data Transfer). A login screen will be displayed.

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Electronic Data Transfer Login Screen



- 4.3.3 Enter the Username and Password to allow access to the client schema in which the temporary tables reside. (Note: the temporary tables will normally reside in the shipper/generator's schema on the WWIS server at the WIPP. In this case, the Username and Password will be the same as those used to login to the WWIS.)
- 4.3.4 Select the Connect button on the screen. The connection to the client server will be completed or an error message will be displayed. The electronic data transfer screen will appear with the numbers of the container records that are available for transfer from the temporary tables.
- 4.3.5 Select the container record(s) to be transferred. (Note: If a record is selected which has already been submitted and accepted by the WWIS, a message will appear stating that the record already exists and the WWIS will not transfer the record.) All of the records may be marked by selecting the Select All button or the selection may be reversed using the Unselect All button. Individual records may

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be selected or unselected by double-clicking a record with the mouse pointer. The selected records will turn red.

- 4.3.6 The data transfer is initiated by selecting the Transfer Data button (lightning bolt icon) on the button bar at the top of the screen.
- 4.3.7 The transfer screen will provide a real-time indication as records are accepted or rejected. Once the entire transfer is complete, each record of interest may be highlighted and the Detail Errors button (eyeglasses icon) selected to view the specific reasons why a container was rejected.
- 4.3.8 A printout of the accepted and rejected container numbers may be obtained, complete with a detailed listing of the reasons for rejection of any of the containers, by selecting the Print button (printer icon).
- 4.3.9 The electronic data transfer session may be exited by selecting the Exit button (door icon).

4.4 Manual Entry Of Proposed Shipment Information

- 4.4.1 To input proposed shipment information, go to the menu bar and select the Shipping menu.
- 4.4.2 Select the Shipping Data Entry option. The Shipment entry screen (the first of two entry screens) will be displayed.

Shipping Data Entry Screen

The screenshot shows the 'Shipping Data Entry' screen with the following fields and sections:

- Shipment Information:**
 - Shipment Number: []
 - Shipment Status: []
 - Shipment Name: []
 - Vehicle Type: Truck
 - Destination: []
 - Load: []
 - Shipment Status: New Shipment
- Packaging:**
 - Package Type: []
 - Package Number: []
 - Package Description: []
 - Package Weight: []
 - Package Length: []
 - Package Width: []
 - Package Height: []
 - Package Material: []
 - Package Type & Material: []
 - Cost Rate: []
 - Cost Rate 1M: []
 - Cost Rate 2M: []
 - Shipping Category: []
- Assemblies:**
 - Assembly ID: []
 - Location: []

Number assigned to the shipment: []

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- 4.4.3 Begin by entering data into the Shipment Information section of the screen provided.
- 4.4.4 After completing the Shipment portion of the screen, identify a Package Type (TRUPACT or RH CASK) and provide the required information for that package. The following fields may be left blank initially, but must be completed before the shipment physically embarks on its trip to the WIPP:
- C Shipment send date
 - C Packaging Number
 - C Outer containment assembly (OCA) lid number
 - C Inner containment vessel (ICA) closure date
 - C Radiation dose rate at surface (contact)
 - C Radiation dose rate at 1m
 - C Radiation dose rate at 2m

Entering the shipping category is optional on the form but if it is not entered, the program will fill in the field with the shipping category of the first container entered and ensure that all subsequently entered containers are compatible.

- 4.4.5 After completing the Packaging portion of the screen, input the Assembly number(s) assigned to the package. (Like a 7-drum assembly, each SWB and TDOP will have an assigned assembly number. For SWBs and TDOPs, this number may be the same or different from the waste container number, as long as it is a unique assembly number to the WWIS.)
- 4.4.6 Place the cursor in the Assembly field to which waste container numbers are to be assigned and select the Containers button (waste drum icon) to toggle to the Container Assembly Data Screen shown below.
- 4.4.7 Assign the containers belonging to the assembly by placing the cursor in the Container Number field and selecting the List button to bring up a list of available waste containers of the appropriate type that have been approved in the certification module.

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Container Assembly Data Screen

Container Number	Container Wgt	Disse Rate	Charge

- 4.4.8 Once the waste container numbers have all been entered for the assembly, it is necessary to save the information by selecting the Save button (floppy disk icon) on the button bar. Do not select the Submit Shipment button (envelope icon) until all package, assembly, and waste container information associated with the shipment has been entered. Shipment data may be changed on records which have been saved, but not yet submitted.
- 4.4.9 Toggle back to the Shipment screen by selecting the Shipment button (truck icon) and place the cursor in the next assembly field (if applicable) and toggle back to the Container Data Assembly Screen. Following the same procedure as for the first assembly, input the waste container information for this assembly and use the Save button to save the data.
- 4.4.10 Toggle back to the Shipment screen and repeat the above process for each shipping package that will be included in the shipment.

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- 4.4.11 Once all packages and waste container information have been correctly identified and saved, select the Submit Shipment button to finalize the submittal process to the WWIS and to acknowledge that the shipment information is correct. All data may be changed up to the point of the final submittal. Any errors trapped by the WWIS edit/limit checks will be identified at the time of submittal and must be corrected before the shipment information will be accepted.
- 4.4.12 Dunnage containers may be added to the available list while keeping the Shipment window open. Select the Shipping module from the main menu bar and then select Dunnage Cntr Entry from the Shipping menu. The screen for entering dunnage container information will be displayed.

Dunnage Container Data Entry Screen

The screenshot displays the 'Dunnage Containers' data entry screen. The window title is 'WIS [Input Dunnage Containers: FM0530 Database testUser OFF-NEWS]'. The menu bar includes 'Characterization', 'Certification', 'Shipping', 'Inventory', 'Query', 'Admin', and 'Exit'. The toolbar contains icons for file operations and navigation. The main area is titled 'Dunnage Containers' and features a table on the left with a red vertical scrollbar and a data entry form on the right. The table has a header 'Cntr Num' and several rows. The form includes fields for 'Shipper Site ID', 'Container Type', 'Description', 'Shipment Num', 'Packaging Num', 'Assembly Id', and 'Disposal Date'. A status bar at the bottom left shows 'Container number Count *3'.

- 4.4.13 Complete the applicable information for dunnage containers to be included in the shipment and save the dunnage records using the Save button (floppy disk icon).

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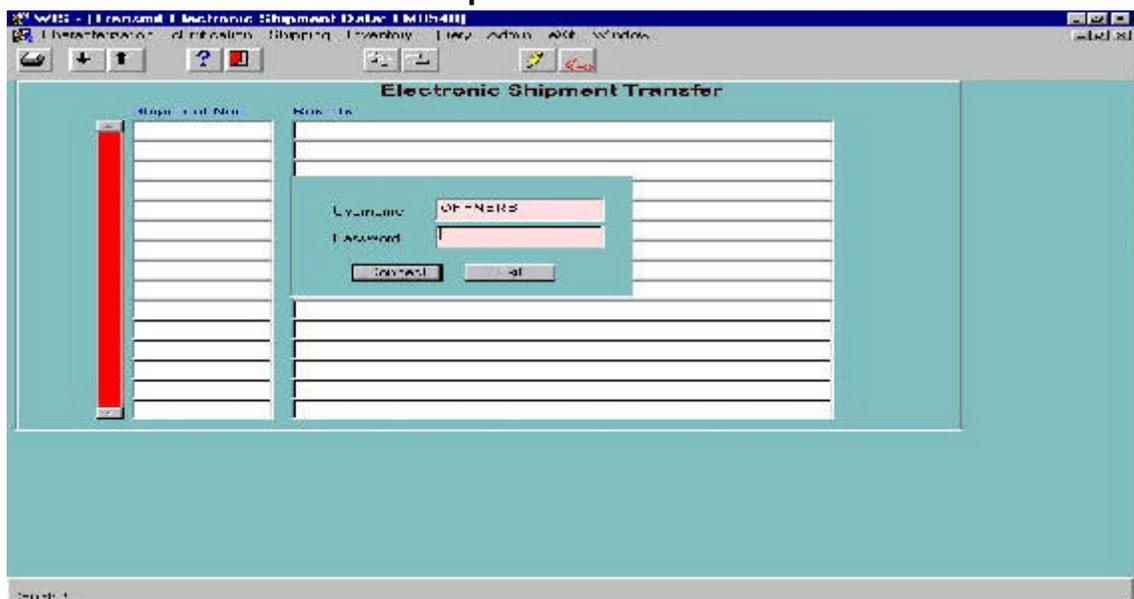
- 4.4.14 Exit the dunnage container screen by selecting the Exit button (door icon). Upon returning to the Shipment Data Entry screen, the newly entered dunnage containers will be available for selection from the container selection lists (as long as they have a compatible container type).

4.5 Electronic Entry Of Proposed Shipment Information

Attachment 1 identifies the five tables of information that must be transmitted for each proposed shipment to the WIPP. The tables show the required data entry fields and their respective formats.

- 4.5.1 Initiate the electronic data transfer of records resident on the client computer by going to the menu bar and selecting the Shipping module.
- 4.5.2 Select the Shipping Data Transfer option of the module. A login screen will be displayed.
- 4.5.3 Enter the Username and Password to allow access to the client schema in which the temporary tables reside. (Note: The temporary tables will normally reside in the shipper/generator's schema on the WWIS server at the WIPP. In this case, the Username and Password will be the same as those used to login to the WWIS.)
- 4.5.4 Select the Connect button on the screen. The connection to the WWIS will be completed or an error message will be displayed. The screen shown below will appear with the numbers of the proposed shipments that are available for transfer from the temporary data files.

Electronic Shipment Data Transfer Screen



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- 4.5.5 Shipment numbers may be marked and transferred in the same manner as used to transfer electronic Characterization and Certification container data.
- 4.5.6 Error messages are displayed by selecting the Detail Errors button (eyeglasses icon) and may be printed by selecting the Print button (printer icon) while the list of Detailed Errors is still displayed.
- 4.5.7 Exit the data input session by selecting the Exit button (door icon).

4.6 Procedure To Correct Errors On Records Accepted By The WWIS

Once a record has been entered into the WWIS and has passed the computerized edit/limit checks, the record data fields are "protected" and cannot be changed. The only exception to this are the seven shipment data fields that may be submitted up to the time of shipment as identified in Section 2.1.4. If submitted, these fields become "protected" when the WIPP DA approves the shipment. Therefore, if any of the seven fields are subject to change, it is recommended that this information be left blank until near the time of the actual shipment. With only these allowable exceptions, the only way that a shipper/generator may revise an accepted WWIS record is to request the WIPP DA to delete the record in writing with an explanation for the deletion. This activity results in a copy of the deleted record being saved in the Change Log. The entire record must then be re-entered with any desired corrections.

4.7 Utilizing General Query Techniques

A special Query module is provided in the WWIS with features to access all available data easily. The Query module allows the user to shift easily between container data and shipping information screens. Data may be queried from the data input screens (such as the Characterization Data Entry screen), but the user is limited to the Data Status Code applicable to the information originally input on the screen. The Query module provides features to move from container information to related shipping information and vice versa.

The method of executing a query is the same for all screens within the WWIS. To initiate a query, perform the following steps.

- 4.7.1 Press F7 or select the Find button (flashlight icon) on the button bar. A message will appear in the screen footer saying "Enter a query".
- 4.7.2 Input any criteria into any data field that must be met in the query. For example, to request all containers with Container Numbers beginning with "RFD" an entry of "RFD%" would be made in the Container Num field. ("% " is the wildcard character.) If no search criteria are entered, all available records for the shipper/generator's site will be retrieved when the query is executed.

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- 4.7.3 Press F8 or re-select the Find button to execute the query. In the case of the example above, all containers with container numbers beginning with the characters "RFD" will become accessible for viewing.
- 4.7.4 Navigate through the records retrieved by the query by using the keyboard arrows or by using the "Up" and "Down" buttons (arrow icons) on the button bar.
- 4.7.5 In order to determine the number of records that will be retrieved by the Query, press Shift-F2 after the selection criteria have been entered but before the query is executed. The screen footer will display the number of records that will be retrieved.
- 4.7.6 To exit from the Query screen, press Ctrl-Q or select the Exit button (door icon). If the screen is in "Query Mode," i.e., the screen footer is displaying "Enter a query," at the time the Exit button is selected, this action will simply discontinue the query. In this case, the Exit button must be selected one more time to exit from the screen.

4.8 Utilizing The Query Module

The Query module may be used to review data in the WWIS database. Viewers can determine the approval status of container and shipping records by querying the different status codes to see which container or shipments hold that code. For example, querying all records having a container status code of "Certification Data Approved By WIPP" will determine if a Certification data record has been approved or disapproved by the WIPP. If the record is not found in that query, it should be found by querying records with the container status code "Pending Certification Data Approval By WIPP". Container records that have been saved, but not yet submitted, will have the status of "Pre-submittal to Characterization or Certification Approval" depending upon whether the containers were saved in the Characterization or Certification module.

- 4.8.1 To review the records in the WWIS utilizing the Query menu, go to the Menu Bar and select the Query menu.
- 4.8.2 Select the Container Query or Shipment Query option. The screens that will appear are shown below.

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Shipment Information Screen

Shipment Information

Shipment Number: Shipper Site Id: Transporter Name:

Vehicle Type: Confirmation Date: Send Date: Shipment Status:

Receipt Date:

Packaging

Packaging Type:

Packaging Num: Container Type Allowed: DCA Lid Number: CV Closure Date:

D.C.T. Description:

Decay Heat (walls): Decay Heat (mrem/hr): Dose Rate Surface (mrem/hr):

Dose Rate 1m (mrem/hr): Dose Rate 2m (mrem/hr): Shipping Category:

Radiological Quantity:
 Reportable
 Highway Route Control

Assemblies

Assembly Id	Assembly Status	Packaged Weight (Kg)
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Enter a query, press F3 to execute, Ctrl+q to cancel.
Count *) ENTER QUERY

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Review Container Data Screen

Review Container Data

Waste Stream Profile: _____
 Shipper Site ID: _____
 Container Number: _____
 Container Type: _____
 Data Status Code: _____

WAC Rev Num: _____
 WAC Exception Num: _____
 Cart Site: _____
 Cart Date: _____

Waste Handling Code: _____
 Waste Type Code: _____

Waste Stream BIR ID: _____
 Waste Stream MWIR ID: _____

Generator Site ID: _____
 IDC Code: _____
 Matrix Code: _____
 Transfer Code: _____
 Shipping Category: _____

Tri Alpha Act (Ci): _____
 Tri Alpha Act U-235 (Ci): _____
 Tri Alpha Act U-238 (Ci): _____
 Tri Alpha Act: Gross: (Hemol) (Ci/g): _____
 Pu239 Fiss Grm Eq (FGE): _____
 Pu239 Fiss Grm Eq: (Hemol) (Ci/g): _____
 Pu239 Eq Act (PE-Ci): _____

Pay: Has: (w/ills): _____
 Uoey Host: (w/ills): _____

Types of Packaging: _____
 FI Factor %: _____
 Liner Type: _____
 Liner Punctured

Pub Cons (ppm): _____

Change Date: _____
 Vent Date: _____
 Filter Install Date: _____
 Filter Model Number: _____
 Application Method: _____
 Gas Gen Rate (l/100cm²): _____
 Hydrogen Methane Gen Rate (moles): _____
 Gas Gen Cont. Data: _____

Gross Weight (kg): _____
 Gross Weight (cont) (kg): _____
 Waste Weight (kg): _____

Alpha Surf Cont. (dpm/100 cm²): _____
 Beta/Gamma Surf Cont. (cpm/100 cm²): _____
 Neutron Dose Rate (mrem/hr): _____
 Beta/Gamma Dose Rate (mrem/hr): _____

Disposal Date: _____
 Overpack Container Number: _____
 Overpack Container Type: _____

Enter a query; press F8 to re-execute, Ctrl+Q to cancel.
 Count: 0 ENTER QUERY

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- 4.8.3 If the screen is not cleared, clear the screen (as described in Section 4.7) by pressing F7 or selecting the Find button. A message will appear in the screen footer saying, "Enter a query".
- 4.8.4 Enter the search criteria as outlined in Section 4.7. Note that the query screen has a selection menu for the Container Status Codes or Shipment Status (dependent upon the query screen). Include the desired status code in the selection criteria.
- 4.8.5 Execute the query using the general query techniques described in Section 4.7.
- 4.8.6 Toggle between the Shipment and Container screens as desired, by selecting the Shipment and Container buttons at the right end of the button bar on each of the screens.
- 4.8.7 Exit the module by selecting the Exit button.

4.9 Viewing and Printing Reports

Standardized reports are available from each module of the WWIS as a menu option. As noted in the above procedures, electronic data transfer error reports may be printed by selecting the Print button while utilizing the electronic transfer screen.

- 4.9.1 Go to the WWIS menu bar and select the module that has the desired report.
- 4.9.2 Select the desired report on the menu and a screen will be presented (as shown below) which includes output device options (screen, file, printer, mail, or preview) and applicable selection criteria (such as waste stream profile number or container status depending upon the report selected).

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Report Criteria Selection Example

The screenshot shows a Windows-style dialog box titled "RP0360. Runtime Parameter Form". The menu bar includes "File", "Edit", "Window", and "Help". Below the menu bar are four buttons: "Previous", "Next", "Run Report", and "Cancel". The main content area has a teal border and contains the following text and controls:

- Waste Isolation Pilot Plant**
- Report - **RP0360** **Waste Container Data Report**
- Output Device**: A dropdown menu with "Preview" selected.
- Filename**: An empty text input field.
- Number of Copies**: A text input field containing the number "1".
- Container Number**: A dropdown menu with a tilde symbol (~).
- Site Id**: A dropdown menu with a tilde symbol (~).
- Waste Stream**: A dropdown menu with a tilde symbol (~).
- Data Status Code**: A dropdown menu with a tilde symbol (~).

- 4.9.3 Enter the desired output device and selection criteria and then select the Run Report button. The report will print on the output device selected.
- 4.9.4 To preview the report, leave the output device selection criterion at its default value of "Preview." The report may then be navigated via the provided "Prev," "Next," "First," "Last," and "Page:" buttons.
- 4.9.5 The report may be printed directly from within the Report Previewer, by selecting the provided "Print" button.
- 4.9.6 Select the "Close" button to exit from the Report Previewer.

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5.0 UPDATING ADMINISTRATIVE REFERENCE DATA

The WWIS DA must input data to the administrative reference data tables that are used as comparison files for edit checks performed by the WWIS. Shipper/generator data input to data fields that have corresponding look-up tables must exactly match the entry in the look-up table or the record will be rejected.

- 5.1 Review reference data tables by selecting the Admin module from the menu bar and then selecting Reference Data Reports.
- 5.2 Select the desired reference table and then view or print the list using the standardized report menu.
- 5.3 If additional site-specific data is identified that needs be included in the reference data tables, contact and work with the WIPP DA to get the applicable tables updated. Note: If changes to site specific characterization methods or assay methods are required, the user making the request must provide documentation that audits have been performed or other necessary approvals have been obtained prior to initiation of the change. For example: When a new assay method or system is to be used, CAO must perform an adequacy review of procedures and an audit of system performance in order for the method or system to be used in the program.
- 5.4 Once the WIPP DA has updated the tables, the shipper/generator site may reprint the Reference Data Report to confirm that the tables have been correctly updated and that the WWIS should now accept any newly entered values.

6.0 REFERENCES

- C 40 CFR, Subparts 191/194, Compliance Certification for the Waste Isolation Pilot Plant
- C Hazardous Waste Facility Permit, Waste Isolation Pilot Plant, Permit No. NM489139088-TSDF, issued by the New Mexico Environment Department, October 27, 1999
- C DOE/WIPP-069, Waste Acceptance Criteria for the Waste Isolation Pilot Plant

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ATTACHMENT 1

**DATA FIELDS AND FORMAT REQUIREMENTS FOR THE
CHARACTERIZATION, CERTIFICATION, AND SHIPPING MODULES**

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Attachment 1 - Data Field and Format Requirements for the Characterization, Certification, and Shipping Modules

Table Name	Field Name	Definition	Reqd ?	Field Format	Units	Edit/Limit Checks	Driver(s)
TMP_WST_CNTRS							
Electronic transfer temporary table used to transfer waste containers.							
TMP_WST_CNTRS	SITE_ID	2 digit identification code assigned to the site which ships the waste.	YES	VARCHAR2(2)	n/a	LOV of shipper sites	40CFR 264.73 Required for Operating Record Primary DB Key field
TMP_WST_CNTRS	CNTR_NUM	A unique identification number assigned to each container.	YES	VARCHAR2(16)	n/a	unique	40CFR 264.73 Required for Operating Record Primary DB Key field
TMP_WST_CNTRS	HANDLING_CODE	The code is "CH" for contact-handled or "RH" for remote-handled TRU waste.	YES	VARCHAR2(2)	n/a	LOV of handling codes	Stores CH and RH information that is used by the database and provides information for queries.
TMP_WST_CNTRS	BG_DOSE_RATE	Beta/gamma contact dose rate at the surface of the Type A container.	YES; Reqd for Cert	NUMBER(7)	mR/hr	<= ref_wc_dose_rate_limits.bg_dose_rate_limit, bg_dose_rate + neut_dose_rate <= ref_wc_dose_rate_limits.total_dose_rate_limit	Information is used by Waste Handling to minimize radiation exposures ALARA. Compliance with WAC and WIPP TSR 5.9.10
TMP_WST_CNTRS	NEUT_DOSE_RATE	Neutron contact dose rate at the surface of the Type A container.	YES; Reqd for Cert	NUMBER(7)	mR/hr	<= ref_wc_dose_rate_limits.neut_dose_rate_limit, bg_dose_rate + neut_dose_rate <= ref_wc_dose_rate_limits.total_dose_rate_limit	Information is used by Waste Handling to minimize radiation exposures ALARA. Compliance with WAC and WIPP TSR 5.9.10
TMP_WST_CNTRS	CLOSURE_DATE	Date the container was closed.	YES; Reqd for Cert	DATE	n/a	none	WAP Table B-8. Compliance with Drum Age Criteria
TMP_WST_CNTRS	DECAY_HEAT	The rate of deposition of thermal energy within the container associated with the decay of radionuclides. The terms "decay heat" and "thermal power" are synonymous.	YES	NUMBER(10,6)	watt	<= ref_wac_limits.max_rh_decay_heat if handling_code='RH'	Compliance with WIPP SAR 3.2.10 requirements for repository thermal loading - 10kW per acre.

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Attachment 1 - Data Field and Format Requirements for the Characterization, Certification, and Shipping Modules

Table Name	Field Name	Definition	Reqd ?	Field Format	Units	Edit/Limit Checks	Driver(s)
TMP_WST_CNTRS	DECAY_HEAT_UNCERT	Uncertainty associated with the decay heat value for the container as required by the WAC.	YES; Reqd for Cert	NUMBER(10,6)	watt	none	No regulatory reporting driver. Transportation use. Listed in Appendix A of the WAC as reportable data.
TMP_WST_CNTRS	LINER_PUNCTURED	Identifies whether the container liner was punctured (if applicable).	NO	VARCHAR2(1)	n/a	Y if liner_type not NULL, NULL if liner_type is NULL.	WAP. Compliance with Drum Age Criteria for headspace gas sampling and analysis
TMP_WST_CNTRS	VENT_DATE	The date when the container was vented and, if applicable, the liner punctured.	YES	DATE	n/a	none	WAP. Compliance with Drum Age Criteria for headspace gas sampling and analysis
TMP_WST_CNTRS	GENERATOR_SITE_ID	2 digit identification code assigned to the site which generated the waste.	YES	VARCHAR2(2)	n/a	LOV of generator sites	WAP Table B-8.
TMP_WST_CNTRS	IDC_CODE	A specific Item Description Code (IDC) assigned to individual waste forms to identify their source.	NO	VARCHAR2(4)	n/a	WAP Table B-8.	WAP Table B-8.
TMP_WST_CNTRS	TRUCON_CODE	The TRUCON code which describes the contents of the container based on the site item description code.	YES	VARCHAR2(6)	n/a	LOV of TRUCON codes	No regulatory reporting driver. Transportation use only. TRUCON Codes required for edit check against the reference table entries.
TMP_WST_CNTRS	MATRIX_CODE	Numerical codes used to classify mixed wastes at DOE facilities.	YES	VARCHAR2(5)	n/a	none	WAP Table B-8.
TMP_WST_CNTRS	FILTER_INSTALL_DATE	Installation date of initially installed approved filter.	YES	DATE	n/a	none	WAP. Compliance with Drum Age Criteria for headspace gas sampling and analysis
TMP_WST_CNTRS	CERT_SITE	2-digit identification code assigned to the site that certifies the waste.	YES; Reqd for Cert	VARCHAR2(2)	n/a	LOV of certifier sites	No regulatory reporting driver. Required for check of site certification authority.

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Table Name	Field Name	Definition	Reqd ?	Field Format	Units	Edit/Limit Checks	Driver(s)
TMP_WST_CNTRS	CERT_DATE	The date the container was certified.	YES; Reqd for Cert	DATE	n/a	none	WAP Table B-8.
TMP_WST_CNTRS	FILL_FACTOR	Estimated percentage of the waste container volume occupied by the waste (zero percent is interpreted as dunnage used to prevent waste movement).	YES; Reqd for Cert	NUMBER(3)	%	0-100	Required for Biennial Report. Information is used for queries of quantities of waste volume emplaced in the repository.
TMP_WST_CNTRS	GROSS_WEIGHT	The gross weight of a container.	YES; Reqd for Cert	NUMBER(10,2)	kg	<= ref_container_types.gross_wgt_limit	Class 1. Compliance with WIPP WAC and WIPP Waste Handling limits. Contained in WAP Table B-8
TMP_WST_CNTRS	GROSS_WEIGHT_UNCERT	The uncertainty associated with the gross weight value of the container as required by the WAC.	NO	NUMBER(10,2)	kg	none	No regulatory reporting driver. Transportation use. TRUPACT-II SAR.
TMP_WST_CNTRS	LAYERS_OF_PACKAGING	Identifies the number of layers of plastic confinement within a container.	NO	NUMBER(3)	n/a	none	No regulatory reporting driver. Transportation use only. TRUPACT-II SAR
TMP_WST_CNTRS	PCB_CONC	The concentration of polychlorinated biphenyl's.	YES; Reqd for Cert	NUMBER(6)	ppm	<= ref_wac_limits.max_pcb_conc	Compliance with WIPP WAC and WAP Table B-8.
TMP_WST_CNTRS	PU239_EQ_ACT	The Pu-239 equivalent activity per container.	YES; Reqd for Cert	NUMBER(18,12)	PE-ci	<= ref_container_types.pu_239_eq_act_limit	Section 5.9.12 of the TSR. Included in the WIPP WAC.
TMP_WST_CNTRS	PU239_FISS_GM_EQ	The Pu-239 fissile gram equivalent per container.	YES	NUMBER(5,2)	FGE	<= ref_container_types.pu_239_fiss_gm_eq_limit	Section 5.9.12 of the TSR. Included in the WIPP WAC.

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TMP_WST_CNTRS	PU239_FISS_GM_EQ_UNCERT	The Pu-239 fissile gram equivalent uncertainty per container as required by the WAC.	YES	NUMBER(5,2)	FGE	none	No regulatory reporting driver. Transportation use only. However, listed in Appendix A of the WAC as reportable data.
TMP_WST_CNTRS	ALPHA_SURF_CONT	The removable alpha emitting radionuclide surface contamination on the waste container.	YES; Reqd for Cert	NUMBER(4)	dpm/ 100cm ²	<= ref_wac_limits.max_alpha_surf_cont	Section 5.9.12 of the TSR. Included in the WIPP WAC.
TMP_WST_CNTRS	BETA_GAMMA_SURF_CONT	The removable beta/gamma emitting radionuclide surface contamination on the waste container.	YES; Reqd for Cert	NUMBER(5)	dpm/ 100cm ²	<= ref_wac_limits.max_bg_surf_cont	Section 5.9.12 of the TSR. Included in the WIPP WAC.
TMP_WST_CNTRS	TRU_ALPHA_ACT	Summation of the alpha activities of the transuranic isotopes per container.	YES	NUMBER(18,1 2)	ci		No regulatory reporting driver. However, listed in Appendix A of the WAC as reportable data.
TMP_WST_CNTRS	TRU_ALPHA_ACT_CONC	Summation of the alpha activities of the transuranic isotopes divided by the mass of the waste within a container (excluding the mass of the container, liner, and any shielding). The reported value does not include any uncertainty.	YES	NUMBER(18,1 2)	ci/g	tru_alpha_act_conc > ref_wac_limits. min_tru_alpha_act_conc	Compliance with WIPP WAC, EPA Compliance Certification, Land Withdrawal Act and regulatory minimum limit of 100 nCi/g.
TMP_WST_CNTRS	TRU_ALPHA_ACT_CONC_UNCERT	Uncertainty associated with the reported TRU alpha activity concentration as required by the WAC.	YES	NUMBER(18,1 2)	ci/g	None	No regulatory reporting requirement. However, listed in Appendix A of the WAC as reportable data.

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Table Name	Field Name	Definition	Reqd ?	Field Format	Units	Edit/Limit Checks	Driver(s)
TMP_WST_CNTRS	TRU_ALPHA_ACT_UNCERT	Uncertainty associated with the reported TRU alpha activity per container as required by the WAC.	YES; Reqd for Cert	NUMBER(18,12)	ci	None	No regulatory reporting requirement. However, listed in Appendix A of the WAC as reportable data.
TMP_WST_CNTRS	WAC_REV_NUM	Revision number of the WIPP-WAC to which the waste was certified.	YES	VARCHAR2(2)	n/a	LOV of WAC revisions	No regulatory reporting driver.
TMP_WST_CNTRS	WST_STRM_PROFILE	The number assigned to the Waste Stream Profile Form associated with the waste stream. (Concatenating a period and additional numeric value to the end of the waste stream number designates a waste stream lot.)	YES	VARCHAR2(20)	n/a	LOV of WSPFs, CHARZ: WSPF must be unapproved, CERT: WSPF must be approved.	WAP Table B-8.
TMP_WST_CNTRS	SHIPPING_CATEGORY	The shipping category assigned to the container.	YES; Reqd for Cert	VARCHAR2(10)	n/a	LOV of shipping categories, All containers in the same package must have the same shipping category.	No regulatory reporting driver. Required for edit check check against the reference table entries.
TMP_WST_CNTRS	ASPIRATION_METHOD_ID	Method used for aspirating the container prior to shipment per Appendix 1.3.7 of the TRUPACT-II SAR. Method is to be identified as either Option 1, 2, or 3.	YES	VARCHAR2(1)	n/a	LOV of aspiration methods	No regulatory reporting driver. Transportation use only. TRUPACT-II SAR. Can also be used to verify compliance with Drum Age Criteria requirements for headspace gas sampling of newly generated waste.
TMP_WST_CNTRS	FILTER_MODEL_NUMBER	Vendor model number of the filter(s) used to vent the container.	YES	VARCHAR2(6)	n/a	LOV of filter models	No regulatory reporting driver. Required for Transportation. Approved filter list included in the WAC. To be used for future Emissions Reporting at WIPP.
TMP_WST_CNTRS	TYPE_CODE	A 3-digit container type code.	YES	VARCHAR2(3)	n/a	LOV of container types	WAP Table B-8, WIPP WAC and WIPP TSR.
TMP_WST_CNTRS	LINER_TYPE	Identifies the type of container liner if applicable.	No; See Edit/Limit	VARCHAR2(3)	n/a	LOV of liner types, Not NULL if liner_punctured=Y, NULL if liner_punctured is NULL	No regulatory reporting driver. Transportation use only. TRUPACT-II SAR

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Table Name	Field Name	Definition	Reqd ?	Field Format	Units	Edit/Limit Checks	Driver(s)
TMP_WST_CNTRS	WAC_EXCEPT_NUM	A number granted to the shipper for an exception to the WAC. The number consists of a 2-character site code plus the last two numbers of the year the request was made plus a sequential number beginning with one each year.	No; Only for approved Exception on a container basis.	VARCHAR2(13)	n/a	LOV of approved exception numbers	No regulatory driver. Currently planned for approval of containers which exceed room-based VOC limits.
TMP_WST_CNTRS	WASTE_TYPE_CODE	The code is "TRU" for non-mixed waste and "MTRU" for mixed waste.	YES	VARCHAR2(4)	n/a	LOV of waste types	40CFR264.75. Required for Operating Record.
TMP_WST_CNTRS	WST_STRM_BIR_ID	The waste stream BIR identification number.	NO	VARCHAR2(15)	n/a	none	No regulatory reporting driver.
TMP_WST_CNTRS	WST_STRM_MWIR_ID	The waste stream MWIR identification number.	NO	VARCHAR2(15)	n/a	none	No regulatory reporting driver. May be needed by DOE HQ to adjust MWIR database.
TMP_WST_CNTRS	GAS_GEN_RATE	Measured total gas generation rate for a container.	No; See Driver(s)	NUMBER(18,12)	moles/s	none	No regulatory reporting driver. Transportation use only. TRUPACT-II SAR. Required if Aspiration Method is "T" for Test Category Waste.
TMP_WST_CNTRS	GAS_GEN_COMP_DATE	The date of test completion for a container.	No; See Driver(s)	DATE	n/a	none	No regulatory reporting driver. Transportation use only. TRUPACT-II SAR. Required if Aspiration Method is "T" for Test Category Waste.
TMP_WST_CNTRS	GAS_HYD_METH_GEN_RATE	Measured hydrogen and methane gas generation rate for a container.	No; See Driver(s)	NUMBER(18,12)	moles/s	none	No regulatory reporting driver. Transportation use only. TRUPACT-II SAR. Required if Aspiration Method is "T" for Test Category Waste.
TMP_WC_NUCLIDES		Electronic transfer temporary table used to identify the radionuclides associated with each waste container.					
TMP_WC_NUCLIDES	CNTR_NUM	A unique identification number assigned to each container.	YES	VARCHAR2(16)	n/a	none	40CFR 264.73 Required for Operating Record Primary DB Key field
TMP_WC_NUCLIDES	SITE_ID	2-digit identification code assigned to the site which ships the waste.	YES	VARCHAR2(2)	n/a	LOV of sites	40CFR 264.73 Required for Operating Record
TMP_WC_NUCLIDES	RADIONUCLIDE	The radionuclide present in the waste container.	YES	VARCHAR2(7)	n/a	LOV of radionuclides	EPA Compliance Certification
TMP_WC_NUCLIDES	ACTIVITY	Activity of the individual radionuclide.	YES	NUMBER(18,12)	ci	none	EPA Compliance Certification
TMP_WC_NUCLIDES	ACTIVITY_UNCERT	Uncertainty in the reported value of the activity of the individual radionuclide as required by the WAC.	YES	NUMBER(18,12)	ci	none	No regulatory reporting requirement. However, listed in Appendix A of the WAC as reportable data.

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Table Name	Field Name	Definition	Reqd ?	Field Format	Units	Edit/Limit Checks	Driver(s)
TMP_WC_NUCLIDES	MASS	Mass of the individual radionuclide.	YES	NUMBER(18,12)	g	none	EPA Compliance Certification
TMP_WC_NUCLIDES	MASS_UNCERT	Uncertainty in the reported value of the mass of the individual radionuclide as required by the WAC.	YES	NUMBER(18,12)	g	none	No regulatory reporting requirement. However, listed in Appendix A of the WAC as reportable data.
TMP_WC_NUCLIDES	DISPLAYED_SHIP	Flag to identify whether or not the associated radionuclide will be included on the shipment manifest.	NO	CHAR(1)	n/a	Y or NULL	No regulatory reporting driver.
TMP_WC_MAT_PARS		Electronic transfer temporary table used to identify the material parameters associated with each waste container.					
TMP_WC_MAT_PARS	CNTR_NUM	A unique identification number assigned to each container.	YES	VARCHAR2(16)	n/a	none	40CFR 264.73 Required for Operating Record Primary DB Key field Contained in WAP Table B-8
TMP_WC_MAT_PARS	SITE_ID	2-digit identification code assigned to the site that ships the waste.	YES	VARCHAR2(2)	n/a	LOV of sites	40CFR 264.73 Required for Operating Record Primary DB Key field Contained in WAP Table B-8
TMP_WC_MAT_PARS	WASTE_MATL_PARM	Waste materials having the potential of impacting the performance assessment. The sum of these parameters will be added and is equal to the waste weight (which excludes the weight of the drum and liner).	YES	VARCHAR2(40)	n/a	LOV of waste material parameters	EPA Compliance Certification Contained in WAP Table B-8
TMP_WC_MAT_PARS	WGT_OF_MAT_PARS	The estimated weight of the waste material parameter.	YES	NUMBER(10,2)	kg	Sum of wgt_of_mat_parms + ref_container_types.cntr_wgt + ref_liners.wgt = tmp_wst_cntrs.gross_weight +/- ref_wac_limits.mat_parm_diff %	EPA Compliance Certification Contained in WAP Table B-8
TMP_WC_ASSAY_METHODS		Electronic transfer temporary table used to identify the assay methods associated with each waste container.					
TMP_WC_ASSAY_METHODS	CNTR_NUM	A unique identification number assigned to each container.	YES	VARCHAR2(16)	n/a	none	40CFR 264.73 Required for Operating Record Primary DB Key field Contained in WAP Table B-8
TMP_WC_ASSAY_METHODS	SITE_ID	2 digit identification code assigned to the site which ships the waste.	YES	VARCHAR2(2)	n/a	LOV of sites	40CFR 264.73 Required for Operating Record Primary DB Key field Contained in WAP Table B-8
TMP_WC_ASSAY_METHODS	RADIO_ASSAY_METHOD	Identifies the site-specific approved characterization method(s) or system(s) that was used to identify and quantify the radionuclide masses.	YES	VARCHAR2(4)	n/a	LOV of assay methods	No regulatory reporting driver. However, information used at WIPP to confirm approved assay method is used.
TMP_WC_ASSAY_METHODS	ASSAY_DATE	The date the assay was completed at the certification site.	YES	DATE	n/a	none	No regulatory driver. However, a start date for decay calculations of future repository source term
TMP_WC_CHARZ_METHODS		Electronic transfer temporary table used to identify the characterization methods associated with each waste container.					

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Table Name	Field Name	Definition	Reqd ?	Field Format	Units	Edit/Limit Checks	Driver(s)
TMP_WC_CHARZ_METHODS	METHOD_ID	Identifies the characterization methods or systems that were used to obtain the waste characterization data.	YES	VARCHAR2(20)	n/a	LOV of characterization methods	WAP Table B-8. Includes ID of VE and RTR.
TMP_WC_CHARZ_METHODS	SITE_ID	2 digit identification code assigned to the site which ships the waste.	YES	VARCHAR2(2)	n/a	LOV of sites	40CFR 264.73. WAP Table B-8.
TMP_WC_CHARZ_METHODS	CNTR_NUM	A unique identification number assigned to each container.	YES	VARCHAR2(16)	n/a	none	40CFR 264.73. WAP Table B-8.
TMP_WC_CHARZ_METHODS	CHARZ_METHOD_DATE	The date the characterization was completed at the certification site.	YES	DATE	n/a	none	40CFR 264.73. WAP Table B-8.
TMP_WC_HAZ_CODES	Electronic transfer temporary table used to identify the hazardous codes associated with each waste container.						
TMP_WC_HAZ_CODES	CNTR_NUM	A unique identification number assigned to each container.	YES	VARCHAR2(16)	n/a	none	40CFR 264.73 Required for Operating Record Primary DB Key field
TMP_WC_HAZ_CODES	SITE_ID	2 digit identification code assigned to the site which ships the waste.	YES	VARCHAR2(2)	n/a	LOV of sites	40CFR 264.73 Required for Operating Record Primary DB Key field
TMP_WC_HAZ_CODES	HAZ_CODE	Hazardous waste EPA codes listed for the container. This is a multiple occurring field.	YES	VARCHAR2(4)	n/a	LOV of hazardous waste codes	WAP Table B-8. If mixed waste - not required otherwise!
TMP_WC_SAMPLES	Electronic transfer temporary table used to identify the samples associated with each waste container.						
TMP_WC_SAMPLES	CNTR_NUM	A unique identification number assigned to each container.	YES	VARCHAR2(16)	n/a	none	40CFR 264.73 Required for Operating Record Primary DB Key field Contained in WAP Table B-8
TMP_WC_SAMPLES	SITE_ID	2-digit identification code assigned to the site that ships the waste.	YES	VARCHAR2(2)	n/a	LOV of sites	40CFR 264.73 Required for Operating Record Primary DB Key field Contained in WAP Table B-8
TMP_WC_SAMPLES	SAMPLE_ID	The identification number assigned to the sample.	YES	VARCHAR2(15)	n/a	none	Used by the database to establish a unique I.D. for the sample.
TMP_WC_SAMPLES	SAMPLE_TYPE	An acronym for the type of sample being taken (e.g., head space = HS).	YES	VARCHAR2(4)	n/a	LOV of sample types	WAP Table B-8.
TMP_WC_SAMPLES	DATE_SAMPLED	The date the sample was taken.	YES	DATE	n/a	<= tmp_wc_sample_amounts.date_analyzed, tmp_wc_sample_amounts.date_analyzed - date_sampled <= ref_wc_smpl_amt_lmts.date_analyzed_limit	WAP Table B-8.
TMP_WC_SAMPLES	LAYER_NO_SAMPLED	A number assigned to each layer with the headspace being assigned the number 0 and each sequential layer given the next higher number (1, 2, etc.).	NO	NUMBER(2)	n/a	none	No regulatory reporting driver.
TMP_WC_SAMPLE_AMOUNTS	Electronic transfer temporary table used to identify the sample amounts associated with each waste container.						

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Table Name	Field Name	Definition	Reqd ?	Field Format	Units	Edit/Limit Checks	Driver(s)
TMP_WC_SAMPLE_AMOUNTS	CNTR_NUM	A unique identification number assigned to each container.	YES	VARCHAR2(16)	n/a	none	40CFR 264.73 Required for Operating Record Primary DB Key field
TMP_WC_SAMPLE_AMOUNTS	SITE_ID	2-digit identification code assigned to the site that ships the waste.	YES	VARCHAR2(2)	n/a	LOV of sites	40CFR 264.73 Required for Operating Record Primary DB Key field
TMP_WC_SAMPLE_AMOUNTS	SAMPLE_ID	The identification number assigned to the sample.	YES	VARCHAR2(15)	n/a	none	Used by the database to establish a unique I.D. for the sample.
TMP_WC_SAMPLE_AMOUNTS	SAMPLE_TYPE	An acronym for the type of sample being taken (e.g., head space = HS).	YES	VARCHAR2(4)	n/a	LOV of sample types	No regulatory driver for WWIS reporting. However, used at WIPP to correlate analysis results (I.e. HS Gas vs. Totals sample)
TMP_WC_SAMPLE_AMOUNTS	CAS_NUMBER	The chemical abstract number of the element, ion, or compound an analysis seeks to determine; the element of interest.	Yes	VARCHAR2(20)	n/a	LOV of analytes	WAP Table B-8.
TMP_WC_SAMPLE_AMOUNTS	DATE_SAMPLED	The date the analyte sample was taken.	YES	DATE	n/a	none	WAP Table B-8.
TMP_WC_SAMPLE_AMOUNTS	METHOD_ID	Identifies the approved characterization methods that were used to obtain the waste analyte data.	YES	VARCHAR2(20)	n/a	LOV of analysis methods	WAP Table B-8.
TMP_WC_SAMPLE_AMOUNTS	DATE_ANALYZED	The date the analyte analysis was completed.	YES	DATE	n/a	>= tmp_wc_samples.date_sampled, date_analyzed - tmp_wc_samples.date_sampled <= ref_wc_smpl_amt_lmts.date_analyze_d_limit	WAP Table B-8.
TMP_WC_SAMPLE_AMOUNTS	REPORTING_FLAG	Designator which was used by the analytical laboratory to identify detection levels of the analyte within the sample. -- Not Applicable	NO	VARCHAR2(2)	n/a	none	No regulatory driver for WWIS reporting.
TMP_WC_SAMPLE_AMOUNTS	REPORTING_FLAG_B	Designator which was used by the analytical laboratory to identify detection levels of the analyte within the sample. -- B	NO	VARCHAR2(2)	n/a	none	No regulatory driver for WWIS reporting.
TMP_WC_SAMPLE_AMOUNTS	REPORTING_FLAG_E	Designator which was used by the analytical laboratory to identify detection levels of the analyte within the sample. - E	NO	VARCHAR2(2)	n/a	none	No regulatory driver for WWIS reporting.
TMP_WC_SAMPLE_AMOUNTS	REPORTING_FLAG_J	Designator which was used by the analytical laboratory to identify detection levels of the analyte within the sample. -- J	NO	VARCHAR2(2)	n/a	none	No regulatory driver for WWIS reporting.
TMP_WC_SAMPLE_AMOUNTS	REPORTING_FLAG_U	Designator which was used by the analytical laboratory to identify detection levels of the analyte within the sample. - U	NO	VARCHAR2(2)	n/a	none	No regulatory driver for WWIS reporting.

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Table Name	Field Name	Definition	Reqd ?	Field Format	Units	Edit/Limit Checks	Driver(s)
TMP_WC_SAMPLE_AMOUNTS	REPORTING_FLAG_D	Designator which was used by the analytical laboratory to identify detection levels of the analyte within the sample.- D	NO	VARCHAR2(2)	n/a	none	No regulatory driver for WWIS reporting.
TMP_WC_SAMPLE_AMOUNTS	REPORTING_FLAG_CMB	For future use. Currently not used.	NO	VARCHAR2(20)	n/a	none	No regulatory driver for WWIS reporting.
TMP_WC_SAMPLE_AMOUNTS	CONC_MG_KG	The analyte concentration in mg/kg.	YES	NUMBER(10,3)	mg/kg	One of the three conc_ fields must contain a value. The other two must be NULL.	WAP Table B-8. Applicable only to concentrations of total metals homogeneous wastes.
TMP_WC_SAMPLE_AMOUNTS	CONC_PPM	The analyte concentration in ppm.	YES	NUMBER(10,3)	ppm	One of the three conc_ fields must contain a value. The other two must be NULL.	WAP Table B-8. Applicable to headspace gas analysis.
TMP_WC_SAMPLE_AMOUNTS	CONC_VOL_PCT	The analyte concentration in terms of volume percentage.	YES	NUMBER(7,4)	vol%	One of the three conc_ fields must contain a value. The other two must be NULL.	Applicable only to hydrogen and methane concentrations.No regulatory driver for WWIS reporting
TMP_WC_COMMENTS		Electronic transfer temporary table used to identify the comments associated with each waste container.					
TMP_WC_COMMENTS	CNTR_NUM	A unique identification number assigned to each container.	YES	VARCHAR2(16)	n/a	none	40CFR 264.73 Required for Operating Record Primary DB Key field
TMP_WC_COMMENTS	SITE_ID	2 digit identification code assigned to the site which ships the waste.	YES	VARCHAR2(2)	n/a	LOV of sites	40CFR 264.73 Required for Operating Record Primary DB Key field
TMP_WC_COMMENTS	COMMENTS	Data field to be used to provide additional information.	NO	VARCHAR2(200)	n/a	none	No regulatory reporting driver. Data Field is made available to users for the purpose of providing information not captured in other data fields.
TMP_WC_COMMENTS	COMMENT_TYPE	A general category field for comments.	NO	VARCHAR2(25)	n/a	LOV of comment types	No regulatory reporting driver. Data Field is made available to users for the purpose of categorizing information input to the comment field.

References for the WWIS Field Name Drivers:

40CFR262 - Standards
Applicable to Generators of Hazardous Wastes

CCA - Compliance Certification Application (and subsequent Compliance Determination by the EPA)

SAR - WIPP Safety Analysis Report

SARP - TRUPACT-II Safety Analysis Report for Packaging

WAC - Waste Acceptance Criteria for the WIPP

WAP - Waste Analysis Plan, Attachment B; WIPP Hazardous Waste Permit

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Table Name	Field Name	Definition	Reqd?	Field Format	Units	Edit/Limit Check	Driver(s)
TMP_SHIPMENTS		Electronic transfer temporary table used to transfer shipment records.					
TMP_SHIPMENTS	SHIPMENT_NUM	Letters and numbers assigned to uniquely identify the shipment. Must be the Manifest number for mixed waste shipments	YES	VARCHAR2(12)	n/a	unique	40CRF264.73 Required for Operating Record
TMP_SHIPMENTS	SITE_ID	2-digit identification code assigned to the site which ships the waste.	YES	VARCHAR2(2)	n/a	LOV of shipper sites	40CRF264.73 Required for Operating Record
TMP_SHIPMENTS	SEND_DATE	The date that the shipment left the shipper site.	YES; can be null until ship	DATE	n/a	none	Contained in Table B-8 of the WAP
TMP_SHIPMENTS	CERT_DATE	The date when the shipment was certified for transport to the WIPP.	NO	DATE	n/a	none	No regulatory reporting driver
TMP_SHIPMENTS	VEHICLE_TYPE	The type of vehicle used to transport the waste.	NO	VARCHAR2(1)	n/a	LOV of vehicle types	No regulatory reporting driver
TMP_SHIPMENTS	TRANSPORTER_NAME	The name of the transport company of the waste shipment.	YES	VARCHAR2(25)	n/a	LOV of transporters	Contained in Table B-8 of the WAP
TMP_PACKAGING		Electronic transfer temporary table used to identify the shipping packages included in a shipment.					
TMP_PACKAGING	PACKAGING_NUM	The TRUPACT-II, cask or other Type B shipping package number.	Yes; can be null until ship	VARCHAR2(7)	n/a	LOV of available packages	Wap Table B-8
TMP_PACKAGING	SHIPMENT_NUM	Letters and numbers assigned to uniquely identify the shipment. Must be the Manifest number for mixed waste shipments	YES	VARCHAR2(12)	n/a	none	40CRF264.73 Required for Operating Record
TMP_PACKAGING	TYPE_CODE	A 3-digit container group code.	YES	VARCHAR2(3)	n/a	LOV of container types	Required for check of approved container shipping configurations in the TRUPACT-II
TMP_PACKAGING	DECAY_HEAT	Sum of decay heats of containers within the package.	NO	NUMBER(10,6)	watt	none	No regulatory reporting driver. Transportation use only. DOT & TRUPACT-II SAR.
TMP_PACKAGING	DECAY_HEAT_UNCERT	Square root of the sum of the squares of decay heat uncertainties of containers within the package.	NO	NUMBER(10,6)	watt	none	No regulatory reporting driver. Transportation use only - TRUPACT-II SAR
TMP_PACKAGING	DOSE_RATE_1M	Total dose rate at 1 meter from the surface of the Type B packaging (required to assign a transport index).	Yes; can be null until ship	NUMBER(7)	mR/hr	none	No regulatory reporting driver Used to establish Transportation Index per DOT. Currently required for "Complete Ship" status
TMP_PACKAGING	DOT_DESC	U.S. Dept. of Transportation description for the Uniform Hazardous Waste Manifest.	NO	VARCHAR2(160)	n/a	none	No regulatory reporting driver. Transportation use only. DOT
TMP_PACKAGING	DOSE_RATE_2M	Total dose rate at 2 meters from the surface of the Type B packaging.	Yes; can be null until ship	NUMBER(7)	mR/hr	none	No regulatory reporting driver. Transportation use only. DOT & TRUPACT-II SAR. Currently required for "Complete Ship" status
TMP_PACKAGING	DOSE_RATE_SURF	Total dose rate at the surface of the Type B packaging.	Yes; can be null until ship	NUMBER(7)	mR/hr	none	No regulatory reporting driver. Transportation use only. DOT & TRUPACT-II SAR. Currently required for "Complete Ship" status

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TMP_PACKAGING	ICV_CLOSURE_DATE	The date when the inner containment vessel was closed.	Yes; can be null until ship	DATE	n/a	none	TRUPACT-II 60 Day clock start date. Currently required for "Complete Ship" status
TMP_PACKAGING	OCA_LID_NUM	The serial number of the lid of the outer containment vessel.	NO	VARCHAR2(8)	n/a	none	No regulatory reporting driver
TMP_PACKAGING	RADIONUC_RPT_QTY	Does the quantity of radioactive material in a Type B package equal or exceed the quantity listed in 49 CFR 172.101?	NO	VARCHAR2(1)	n/a	Y or NULL	No regulatory reporting driver. Transportation use only. DOT
TMP_PACKAGING	RADIONUC_HWY_ROUTE_CONTR_QTY	Does the quantity of normal form radioactive material in a Type B package exceed 3,000 times the A2 value of the radionuclides as specified in 49 CFR 173.443 or 30,000 curies, whichever is least?	NO	VARCHAR2(1)	n/a	Y or NULL	No regulatory reporting driver. Transportation use only. DOT
TMP_ASSEMBLIES		Electronic transfer temporary table used to identify the waste assemblies contained in each shipping package of a shipment.					
TMP_ASSEMBLIES	ASSEMBLY_ID	A unique number assigned by the shipper to an assembly.	YES	VARCHAR2 (Maximum 8 characters)	n/a	unique	WAP Table B-8.
TMP_ASSEMBLIES	PACKAGING_NUM	The TRUPACT-II, cask or other Type B shipping package number.	YES	VARCHAR2 (Maximum 7 characters)	n/a	none	WAP Table B-8.
TMP_ASSEMBLIES	SHIPMENT_NUM	Letters and numbers assigned to uniquely identify the shipment. Must be the Manifest number for mixed waste shipments	YES	VARCHAR2 (Maximum 12 characters)	n/a	none	40CRF264.73 Required for Operating Record
TMP_SHIP_WST_CNTRS		Electronic transfer temporary table used to identify the assembly, shipping package, and shipment associated with each waste container.					
TMP_SHIP_WST_CNTRS	CNTR_NUM	A unique identification number assigned to each container.	YES	VARCHAR2(16)	n/a	none	40CRF264.73 Required for Operating Record. Primary DB Key field Contained in WAP Table B-8
TMP_SHIP_WST_CNTRS	SHIPMENT_NUM	Letters and numbers assigned to uniquely identify the shipment. Must be the Manifest number for mixed waste shipments	YES	VARCHAR2(12)	n/a	none	40CRF264.73 Required for Operating Record Contained in WAP Table B-8
TMP_SHIP_WST_CNTRS	PACKAGING_NUM	The TRUPACT-II, cask or other Type B shipping package number.	YES	VARCHAR2(7)	n/a	none	Contained in Table B-8 of the WAP
TMP_SHIP_WST_CNTRS	ASSEMBLY_ID	A unique number assigned by the shipper to an assembly.	YES	VARCHAR2(8)	n/a	none	40CRF264.73 Required for Operating Record. Used at WIPP to document emplacement locations of waste containers. Contained in WAP Table B-8
TMP_DUNNAGE_CNTRS		Electronic transfer temporary table used to identify the dunnage containers included in a shipment.					
TMP_DUNNAGE_CNTRS	CNTR_NUM	A unique identification number assigned to each dunnage container which is part of an assembly of waste containers.	YES; if used in waste assy.	VARCHAR2(16)	n/a	unique	40CFR 264.75 Required for Operating Record and Biennial Report.

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TMP_DUNNAGE_CNTRS	PACKAGING_NUM	The TRUPACT-II, cask or other Type B shipping package number.	YES	VARCHAR2(7)	n/a	none	WIPP Land Withdrawal Act WAP Table B-8	
TMP_DUNNAGE_CNTRS	SHIPMENT_NUM	Letters and numbers assigned to uniquely identify the shipment. Must be the Manifest number for mixed waste shipments	YES	VARCHAR2(12)	n/a	none	40CRF264.73 Required for Operating Record	
TMP_DUNNAGE_CNTRS	ASSEMBLY_ID	A unique number assigned by the shipper to an assembly. The number consists of the 2-letter site identification code followed by the last two digits of the year and the 4-digit package assembly number.	YES	VARCHAR2(8)	n/a	none	WAP Table B-8.	
TMP_DUNNAGE_CNTRS	TYPE_CODE	A 3-digit container type code.	YES	CHAR(3)	n/a	LOV of container types	No regulatory driver. However, a needed field for DB construct and facilitates container-related queries and reports of emplaced container types.	

References for the WWIS Field Name Drivers:

40CFR262 - Standards Applicable to Generators of Hazardous Wastes

CCA - Compliance Certification Application

SAR - WIPP Safety Analysis Report

SARP - TRUPACT-II Safety Analysis Report for Packaging

WAC - Waste Acceptance Criteria for the WIPP

WAP - Waste Analysis Plan, Attachment B; WIPP Hazardous Waste Permit