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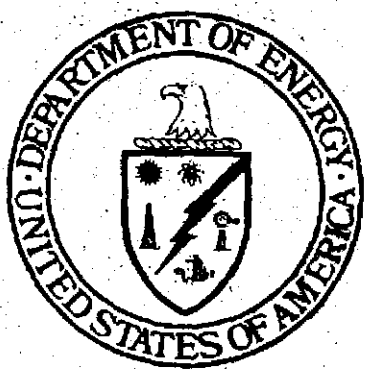
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# Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Report



June 1994

Book 1 of 2

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# Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Report



June 1994

Book 1 of 2

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## TABLE OF CONTENTS

<b>LIST OF FIGURES</b> .....	<b>v</b>
<b>LIST OF TABLES</b> .....	<b>v</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>ES - 1</b>
<b>1. INTRODUCTION</b> .....	<b>1 - 1</b>
1.1 BACKGROUND .....	1 - 1
1.2 PURPOSE .....	1 - 1
1.3 WASTE INVENTORY TERMINOLOGY .....	1 - 3
1.3.1 Inventory Terminology .....	1 - 4
1.3.2 Waste Matrix Code Terminology .....	1 - 4
1.3.3 Waste Profile Terminology .....	1 - 5
1.3.4 Database Terminology .....	1 - 9
1.3.5 Other Terminology .....	1 - 12
1.4 OBJECTIVES .....	1 - 12
1.5 BASELINE INVENTORY UPDATES .....	1 - 13
1.6 DOCUMENT ORGANIZATION .....	1 - 13
<b>2. TRU WASTE DISPOSAL INVENTORY</b> .....	<b>2 - 1</b>
2.1 INTRODUCTION .....	2 - 1
2.2 SOURCES OF TRU WASTE INFORMATION .....	2 - 1
2.2.1 Mixed Waste Inventory Report .....	2 - 1
2.2.2 Nonradionuclide Inventory Database .....	2 - 2
2.2.3 Integrated Data Base .....	2 - 3
2.2.4 Other Sources of TRU Waste Information .....	2 - 3
2.3 METHODOLOGY FOR DEVELOPMENT OF DISPOSAL INVENTORY .....	2 - 3
2.3.1 Estimation of Anticipated Inventory .....	2 - 4
2.3.2 Estimation of Scaling Factor .....	2 - 7
2.3.3 Estimation of Disposal Inventory .....	2 - 7
2.3.4 Estimation of Waste Material Parameters .....	2 - 7
<b>3. WASTE STREAM PROFILE METHODOLOGY</b> .....	<b>3 - 1</b>
3.1 INTRODUCTION .....	3 - 1
3.2 WASTE STREAM PROFILE DESCRIPTION .....	3 - 1

3.3	WASTE STREAM PROFILE METHODOLOGY AND ASSUMPTIONS	3 - 1
3.3.1	Assignment of Waste Material Parameters to MWIR Waste Stream	3 - 1
3.3.2	Assignment of WMC to MWIR Waste Stream	3 - 3
4.	SITE-SPECIFIC WASTE PROFILE METHODOLOGY	4 - 1
4.1	INTRODUCTION	4 - 1
4.2	SITE-SPECIFIC WASTE PROFILE DESCRIPTION	4 - 1
4.3	SITE-SPECIFIC WASTE PROFILE METHODOLOGY	4 - 1
4.3.1	Grouping of WMCs	4 - 1
4.3.2	Assignment of WMCGs to Site-Specific Waste Profiles	4 - 5
4.3.3	Estimation of Non-mixed TRU Waste Volumes	4 - 5
5.	WIPP WASTE PROFILE METHODOLOGY	5 - 1
5.1	INTRODUCTION	5 - 1
5.2	WIPP WASTE PROFILE METHODOLOGY	5 - 1
5.3	WIPP WASTE PROFILE ROLL-UPS	5 - 1
5.4	RADIONUCLIDE ROLL-UPS	5 - 2
6.	WASTE MATERIAL PARAMETERS	6 - 1
6.1	INTRODUCTION	6 - 1
6.2	PARAMETER DESCRIPTION	6 - 1
6.3	METHODOLOGY	6 - 2
6.4	QUALITY ASSURANCE	6 - 4
6.5	WIPP WASTE MATERIAL PARAMETER ROLLUPS	6 - 4
7.	REFERENCES	7 - 1
	APPENDIX A. GLOSSARY	A - 1
	APPENDIX B. ACRONYMS AND ABBREVIATIONS	B - 1
	APPENDIX C. DOE WASTE TREATABILITY GROUPS GUIDANCE	C - 1
	APPENDIX D. NON RADIONUCLIDE INVENTORY DATA SUMMARY	D - 1
	APPENDIX E. WASTE STREAM PROFILES	E - 1



APPENDIX F. SITE-SPECIFIC WASTE PROFILES .....	F - 1
APPENDIX G. SANCHEZ MEMO .....	G - 1
APPENDIX H. MWIR WASTE STREAM QUESTIONNAIRE .....	H - 1
APPENDIX I. IDB TOTALS FOR WASTE RADIONUCLIDES DERIVED FROM TRU WASTE, DECAYED AND ACCUMULATED TO DEC 1992 .....	I - 1
APPENDIX J. METHODOLOGY FOR CHANGING TRU WASTE GENERATOR/STORAGE SITE IDCS .....	J - 1
APPENDIX K. WASTE STREAM IDENTIFICATION CROSS-CORRELATION TABLE	K - 1
APPENDIX L. WTWBIR DATABASE DESCRIPTION .....	L - 1
L.1 MIXED WASTE INVENTORY REPORT DATA .....	L - 1
L.2 NONRADIONUCLIDE INVENTORY DATABASE .....	L - 2
L.3 TABLES AND REPORTS FOR THE WTWBIR .....	L - 4
L.4 WTWBIR TEAM .....	L - 4
L.5 NONRADIONUCLIDE DATABASE .....	L - 5
L.6 MIXED WASTE INVENTORY REPORT .....	L - 5
APPENDIX M. MWIR CODE DESIGNATIONS AND DESCRIPTIONS .....	M - 1

### LIST OF FIGURES

1-1	U.S. Department of Energy Transuranic Waste Generator/Storage Sites . . . . .	1-2
1-2	Blank Waste Stream Profile Form . . . . .	1-6
1-3	Blank Site-Specific Waste Profile Form . . . . .	1-10
1-4	Blank WIPP Waste Profile Form . . . . .	1-11
2-1	Schematic of Waste Stream Profile Methodology . . . . .	2-5
3-1	Example of TRU Waste Stream Profile from Idaho National Engineering Laboratory . . . . .	3-2
4-1	Waste Profile Methodology for Example Waste Streams . . . . .	4-2
4-2	Example of Site-Specific Waste Profile . . . . .	4-3
5-1	WIPP CH-TRU Waste Profile for Combustible Waste . . . . .	5-5
5-2	WIPP CH-TRU Waste Profile for Filter Waste . . . . .	5-6
5-3	WIPP CH-TRU Waste Profile for Graphite Waste . . . . .	5-7
5-4	WIPP CH-TRU Waste Profile for Heterogeneous Waste . . . . .	5-8
5-5	WIPP CH-TRU Waste Profile for Inorganic Nonmetal Waste . . . . .	5-9
5-6	WIPP CH-TRU Waste Profile for Lead/Cadmium Waste . . . . .	5-10
5-7	WIPP CH-TRU Waste Profile for Salt Waste . . . . .	5-11
5-8	WIPP CH-TRU Waste Profile for Soil . . . . .	5-12
5-9	WIPP CH-TRU Waste Profile for Solidified Inorganic Waste . . . . .	5-13
5-10	WIPP CH-TRU Waste Profile for Solidified Organic Waste . . . . .	5-14
5-11	WIPP CH-TRU Waste Profile for Unspecified Metal Waste . . . . .	5-15
5-12	WIPP RH-TRU Waste Profile for Filter Waste . . . . .	5-16
5-13	WIPP RH-TRU Waste Profile for Heterogeneous Waste . . . . .	5-17
5-14	WIPP RH-TRU Waste Profile for Inorganic Nonmetal Waste . . . . .	5-18
5-15	WIPP RH-TRU Waste Profile for Lead/Cadmium Metal Waste . . . . .	5-19
5-16	WIPP RH-TRU Waste Profile for Solidified Inorganic Waste . . . . .	5-20
5-17	WIPP RH-TRU Waste Profile for Unspecified Metal Waste . . . . .	5-21

### LIST OF TABLES

1-1	Technical Data Needs for Performance Assessment Waste Material Parameters	1-3
1-2	Waste Matrix Code Group Names . . . . .	1-7
2-1	Sources of Information for Waste Stream Profiles . . . . .	2-4
3-1	Sources of Information Used in Waste Stream Profiles . . . . .	3-4
3-2	Toxic Substances Control Act (TSCA) TRU Waste . . . . .	3-5
4-1	Sources of Information Used in Site-Specific Waste Profiles . . . . .	4-4
5-1	Sources of Information Used in WIPP Waste Profiles . . . . .	5-1
5-2	Transuranic Waste Disposal Inventory for WIPP . . . . .	5-3
5-3	IDB Totals for Selected Radionuclides, Decayed, and Accumulated to December 1992 . . . . .	5-4
6-1	NID Information . . . . .	6-3
6-2	WIPP CH-TRU Waste Material Parameter Disposal Inventory . . . . .	6-5
6-3	WIPP RH-TRU Waste Material Parameter Disposal Inventory . . . . .	6-6

## EXECUTIVE SUMMARY

The *Waste Isolation Pilot Plant (WIPP) Transuranic Waste Baseline Inventory Report (WTWBIR)* establishes a methodology for grouping wastes of similar physical and chemical properties, from across the U.S. Department of Energy (DOE) transuranic (TRU) waste system, into a series of "waste profiles" that can be used as the basis for waste form discussions with regulatory agencies.

The WIPP baseline inventory is estimated using waste streams identified in the recent information released in the *Mixed Waste Inventory Report (MWIR)*, supplemented by information from the Nonradionuclide Inventory Database (NID) and the 1993 Integrated Data Base (IDB). Each waste stream is defined in a waste stream profile and has been assigned a waste matrix code (WMC) by a DOE TRU waste generator/storage site. Waste stream profiles with WMCs that have similar physical and chemical properties can be combined into a waste matrix code group (WMCG), which is then documented in a site-specific waste profile for each TRU waste generator/storage site that contains waste streams in that particular WMCG.

Based on methodology presented here in the WTWBIR, a maximum of 11 site-specific waste profiles have been identified for contact-handled (CH) TRU waste and a maximum of 11 have been identified for remote-handled (RH) TRU waste. Based on analyses of existing inventories, no site has more than 10 site-specific CH-TRU waste profiles, nor more than 5 site-specific RH-TRU waste profiles. Each of these site-specific waste profiles have unique WMCG criteria and they are developed, if appropriate, for each of the TRU waste generator/storage sites. A particular site-specific waste profile, with a specific WMCG, can be combined with other site-specific waste profiles having identical WMCGs from the TRU waste generator/storage sites to derive a WIPP waste profile. Therefore, a maximum of 11 WIPP waste profiles for CH-TRU waste and a maximum of 6 WIPP waste profiles for RH-TRU waste have been identified that describe the different TRU wastes across the DOE system.

The anticipated inventory of TRU waste is defined as the sum of retrievably stored waste plus currently projected TRU waste volumes. The anticipated inventory is not sufficient to fill the allowed capacity of WIPP (calculated:  $6.2 \times 10^6 \text{ ft}^3$  [ $\sim 1.76 \times 10^5 \text{ m}^3$ ]), and scaling has been developed as a means of examining the impacts of the full repository. Additionally, there is a high uncertainty in and a current lack of data on wastes produced from decontamination and decommissioning (D&D) and environmental restoration (ER) activities. Therefore, the anticipated inventory has been "scaled" to the WIPP capacity. The scaling of the inventory in future revisions of the WTWBIR will be derived from the best available data and assumptions.

An example of five waste streams at two sites (Idaho National Engineering Laboratory and Rocky Flats Plant) has been used to illustrate the waste profile methodology. Preliminary total WIPP inventory volumes for the 11 CH-TRU and 6 RH-TRU WIPP waste profiles are provided; final volumes will be provided in Revision 1 of this document after the DOE TRU waste generator/storage sites have reviewed the data and after quality checks of the data have been completed.

Using the same waste profile methodology, the WTWBIR also estimates the WIPP disposal inventory (anticipated inventory that has been scaled to WIPP design capacity) in terms of 10 waste material parameters and packaging materials that have been identified as inputs needed

for the system prioritization (SP) and performance assessment (PA) calculations. The 10 waste material parameters and packaging materials are waste constituents that occur in TRU waste and are input parameters for one or more SP and PA models or are required to adequately describe the waste form. These parameters may change as a result of SP and PA efforts.

The 10 waste material parameters and packaging materials that are defined and included in the WTWBIR are:

- Inorganics
  - Iron-based metals/alloys
  - Aluminum-based metals/alloys
  - Other metals
  - Other inorganic materials
- Organics
  - Cellulosics
  - Rubber
  - Plastics
- Solidified Materials
  - Inorganic matrix
  - Organic matrix
- Soils
- Packaging Materials
  - Steel
  - Plastic or lead

The waste material parameter information is reported in kilograms per cubic meters ( $\text{kg/m}^3$ ) and estimates of the uncertainty in the waste material parameters have been calculated, based on data derived from the NID (i.e., average, minimum, and maximum estimates of waste material parameters on a per-waste-stream basis). The maximum values for waste material parameters in the waste stream, site-specific, and WIPP waste profiles are expressed on a weight/volume basis. However, the occurrence of more than one waste material parameter at the maximum value within a waste stream is highly unlikely. During SP and PA calculations, the sampling statistics must be controlled so that several waste material parameters do not get sampled all at their maximum value (weight/volume), lest the maximum weight/volume is exceeded. A five-waste-stream/two-site example is used to illustrate the methodology for estimating quantities of waste material parameters. **The preliminary total WIPP inventory for the waste material parameters is provided and should be used in any SP and PA calculations until Rev. 1 of the WTWBIR is published, pending completion of quality checks of the data used. The nonradionuclide and radionuclide inventory presented in this report replaces any previously used information in SP and PA calculations.**

Although the initial purpose of this report is to provide data to be included in the Sandia National Laboratories/New Mexico SP and PA processes, all data are presented and explained in such a way that they can be adapted as needed for other applications. The WTWBIR, Revision 0, is presented in two parts: Book 1 contains this Executive Summary through Chapter 7, References; Book 2 contains Appendix A, Glossary, through Appendix M, MWIR Code Designations and Descriptions.

## CHAPTER 1

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**Information Only**

## 1. INTRODUCTION

### 1.1 BACKGROUND

The Waste Isolation Pilot Plant (WIPP) is a transuranic (TRU) waste management facility operated by the U.S. Department of Energy (DOE). The WIPP is currently identified as the permanent disposal site for DOE TRU waste.

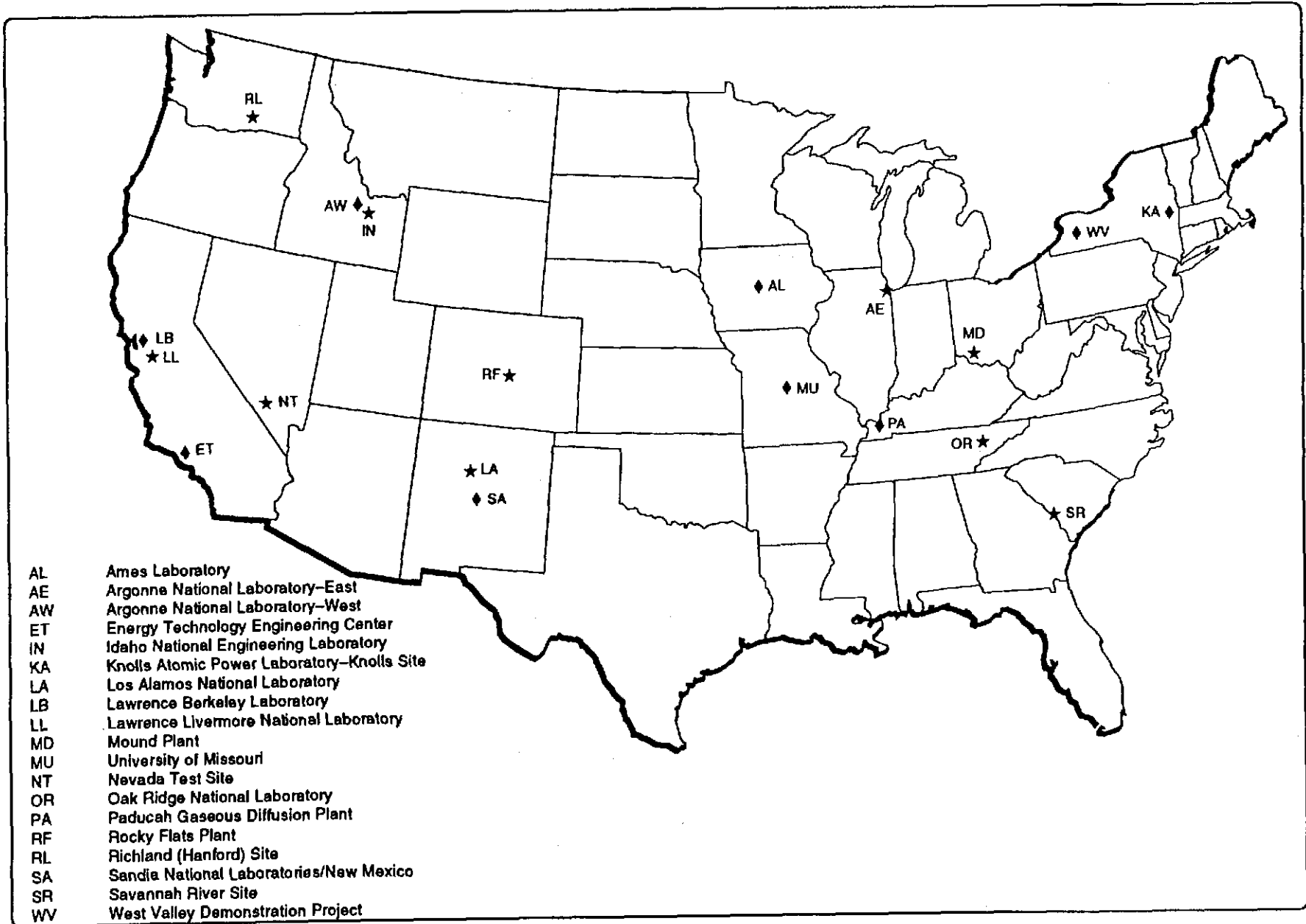
TRU waste is defined as waste that is contaminated with alpha-emitting radionuclides with an atomic number greater than 92, with half-lives greater than 20 years, and concentrations of TRU isotopes greater than 100 nanocuries per gram of waste (DOE, 1988). TRU wastes are classified as either contact-handled (CH) waste or remote-handled (RH) waste, depending on the dose rate at the surface of the waste container. CH-TRU wastes are packaged TRU wastes with an external surface dose rate of 200 millirems (mrem) or less per hour, while RH-TRU wastes are packaged TRU wastes with an external surface dose rate exceeding 200 mrem per hour. Unless otherwise indicated, for purposes of this document, all references to TRU waste include TRU waste and mixed TRU waste (waste that contains both radioactive and hazardous components, as defined by the Atomic Energy Act and the Resource Conservation and Recovery Act [RCRA] as codified in Title 40 Code of Federal Regulations [CFR] Parts 264, 265, 268, and 270 [EPA, 1980a; 1980b; 1986; and 1983]).

The DOE is committed to demonstrating compliance with all applicable regulations prior to permanent disposal of TRU wastes in the WIPP repository. These regulations are the environmental standards for management and disposal of TRU wastes as mandated in 40 CFR Part 191 (EPA, 1993b) and Part 194 (EPA, 1993a), and the RCRA regulations. The WIPP is scheduled to receive and dispose of TRU wastes from 10 major and several minor DOE TRU waste generator/storage sites (see Figure 1-1). Compliance will be demonstrated through performance assessment (PA) calculations based on the inventory of existing and currently projected waste streams developed in this report, and as reported by the DOE TRU waste generator/storage sites.

### 1.2 PURPOSE

The purpose of this document, the *Waste Isolation Pilot Plant Transuranic Waste Baseline Inventory Report* (WTWBIR), is to document the disposal inventory of TRU waste to be emplaced in WIPP from the DOE TRU waste generator/storage sites. This inventory of CH-TRU and RH-TRU waste will be used in systems prioritization (SP) and PA calculations and sensitivity analyses that will support the development of compliance applications to the appropriate regulatory agencies regarding the operations and post-closure timeframes of the WIPP repository.

To accomplish this purpose, the WTWBIR has been developed from the best available information and process knowledge provided by the DOE TRU waste generator/storage sites. The WTWBIR describes a process for grouping individual waste streams with similar physical and chemical properties into waste profiles, based on their waste matrix code (WMC) assigned by the DOE TRU waste generator/storage sites. Waste profiles with similar WMCs, are then combined across the DOE TRU waste system to provide estimated total volumes and total waste material parameters. The methodology for this grouping and combining is discussed in detail in Section 2.3, Methodology for Development of Disposal Inventory, of this document.



★ Indicates Major Site

Figure 1-1. U.S. Department of Energy Transuranic Waste Generator/Storage Sites

The individual waste streams also are evaluated to estimate the occurrence and quantities of waste material parameters (e.g., cellulose, plastics, iron-based metals/alloys, etc.) that have been identified by Sandia National Laboratories/New Mexico (SNL/NM) as being potentially important to the performance of the WIPP repository as defined in Appendix G (see Table 1-1). The methodology, assumptions, and totals of these waste material parameters are described in Chapter 6, Waste Material Parameters.

**TABLE 1-1. TECHNICAL DATA NEEDS FOR PERFORMANCE ASSESSMENT  
WASTE MATERIAL PARAMETERS**

Waste Material Parameter	Input Variable in <u>Current</u> SP/PA Models		Input Variable in SP/PA Models <u>Under Development</u>	Input Variable in Possible <u>Future</u> PA Models
	Gas Generation	Mechanical Characteristics		
Iron-Based Metals/Alloys	YES	YES	YES	YES
Aluminum-Based Metals/Alloys		YES	YES	YES
Other Metals		YES		YES
Other Inorganic Material		YES	YES	YES
Cellulose	YES	YES	YES	YES
Plastics		YES	YES	YES
Rubber	YES <sup>(1)</sup>	YES	YES	YES
Solidified Inorganic Matrix		YES	YES	YES
Solidified Organic Matrix		YES	YES	YES
Soils		YES		

<sup>(1)</sup> Only 50 weight percent included

Although the initial purpose of this report is to provide data to be included in the SNL/NM SP and PA processes, all data are presented and explained in such a way that they can be adapted for other applications.

### 1.3 WASTE INVENTORY TERMINOLOGY

The derivation of a disposal inventory from individual waste streams is a formidable and complex process. To document each step of this process, a system of waste inventory terminology needs to be defined so the reader may more easily follow the process. The following sections provide definitions of terminology used throughout the WTWBIR. These



definitions also are summarized in Appendix A, Glossary, of the WTWBIR. Appendix B provides a list of acronyms and abbreviations used in this document.

### 1.3.1 Inventory Terminology

**Stored Inventory** – That part of the TRU inventory currently in retrievable storage as of the time of the last data call for inventory information is known as "stored inventory." Retrievably stored waste includes waste stored in buildings or in berms with earthen cover since 1970 and does not include any waste that was buried prior to 1970 (DOE, 1994b).

**Projected Inventory** – That part of the inventory that has not been generated but is currently estimated to be generated at some time in the future by the TRU waste generator/storage sites is considered "projected inventory." The estimated timeframe for the projections may vary, but is usually between 20 and 30 years. "Newly generated waste" also is sometimes used as a synonym for the projected inventory.

**Anticipated Inventory** – For the WTWBIR, this is the sum of the stored and projected inventories, calculated:

$$\begin{array}{ccccccc} \text{Stored} & & & & \text{Projected} & & \text{Anticipated} \\ \text{Inventory} & + & & & \text{Inventory} & = & \text{Inventory} \end{array}$$

**Scaling** – The process for adjusting the anticipated inventory to the design limit (disposal inventory) of the WIPP repository is called "scaling." Section 2.3.2 describes the scaling process.

$$\text{Anticipated Inventory} \xrightarrow{\text{Scaling}} \text{Disposal Inventory}$$

**Disposal Inventory** – The total inventory defined for WIPP emplacement (after scaling) to be used for SP and PA calculations is the "disposal inventory."

### 1.3.2 Waste Matrix Code Terminology

**Waste Matrix Code (WMC)** – The WMC is a DOE-developed coding system for organizing waste streams by their physical and chemical properties. A WMC is assigned to each waste stream by the DOE TRU waste generator/storage site. The WMC for each waste stream can be found in the Mixed Waste Inventory Report (MWIR) (DOE, 1994a). This coding system allows waste streams within the DOE TRU waste system that have similar physical and chemical waste form properties to be categorized together. WMCs also have been called "waste treatability codes" in other DOE documents. Appendix C contains the DOE guidance document used to help categorize individual waste streams. An example of a WMC for "heterogeneous waste" would be 5400.

**Waste Matrix Code Group (WMCG)** – A WMCG consists of a series of WMCs that for SP or PA purposes have similar physical and chemical properties. An example of combining WMCs

is the following three WMCs, which either contain particulates or are cemented particulate waste:

- WMC 3100 (inorganic process residues)
- WMC 3110 (inorganic particulates)
- WMC 3150 (solidified process residues)

Because of the restriction on particulate wastes in the *TRU Waste Acceptance Criteria, (WAC) for the Waste Isolation Pilot Plant, Revision 4.0* (DOE, 1991), all particulate waste will usually be solidified prior to shipment to WIPP. Therefore, all three of these WMCs would be the same basic waste form when emplaced in WIPP and have similar physical and chemical properties. Table 1-2 presents all anticipated WMCs for TRU waste and indicates in which WMCG each WMC occurs for the WTWBIR. There are 11 WMCGs used in this WTWBIR. The last two rows in Table 1-2 group WMCs that will not be acceptable to WIPP unless characterized and/or processed using a yet-to-be-developed treatment technology. The combined WMCG for this example is:

#### Solidified Inorganic Waste

### 1.3.3 Waste Profile Terminology

**Waste Stream Profile** – This is a description of a CH-TRU or RH-TRU waste stream destined for shipment to and disposal in WIPP, if authorized under permits and certifications by appropriate regulatory agencies for disposal in the WIPP repository. The waste stream profile is presented in tabular format and is intended to provide a summary of important information about a particular waste stream. Examples of information included in a waste stream profile are:

- Currently and previously used identification codes, including the DOE TRU waste site identification;
- Assigned WMC;
- Volumes of waste currently in retrievable storage and waste projected to be generated: estimated minimum, average, and maximum weights of waste material parameters per cubic meter of waste volume (e.g., iron-based metals/alloys, aluminum-based metals/alloys, cellulose, etc.);
- Whether the waste is CH-TRU or RH-TRU; and
- Hazardous waste codes (EPA codes) as assigned by the DOE TRU waste generator/storage sites for the RCRA-regulated portion of the waste stream.

Figure 1-2 provides an example of a blank waste stream profile form. The methodology and assumptions for developing waste stream profiles are provided in Chapter 3 and printouts of waste stream profiles are provided in Appendix E.

**Site-Specific Waste Profile** – This represents a WMCG at a particular DOE TRU waste generator/storage site. That is, one or more waste stream profiles, at a particular DOE TRU waste site, that have been placed in the same WMCG are summarized in the site-specific waste profile. Examples of information included in a site-specific waste profile are:

- DOE TRU waste generator/storage site identification;

### WASTE STREAM PROFILES

29-Jun-94

DATABASE WS ID		HANDLING		FIELD OFFICE	
WS NAME					
NO MIGRATION VARIANCE PETITION					
WASTE MATRIX CODE - Site	WIPP PART B APPLICATION				
- Group				TRUCON	

Site	<u>IDC's</u>
Assigned	

**WASTE VOLUMES (cu. m.)**

Retrievable	
Projected	
Total	

**EPA CODE(s)**


<u>WASTE PARAMETERS (kg/m3)</u>		<u>Max</u>	<u>Avg</u>	<u>Min</u>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
Rubber				
Plastics				
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel			
	Plastic			

Figure 1-2. Blank Waste Stream Profile Form

**TABLE 1-2. WASTE MATRIX CODE GROUP NAMES**

Waste Matrix Code Group	Waste Matrix Codes
Solidified Inorganic Waste	1000 <sup>1</sup> , 1100 <sup>1</sup> , 1110 <sup>1</sup> , 1120 <sup>1</sup> , 1130 <sup>1</sup> , 1140 <sup>1</sup> , 1190 <sup>1</sup> , 1200 <sup>1</sup> , 1210 <sup>1</sup> , 1220 <sup>1</sup> , 1230 <sup>1</sup> , 1240 <sup>1</sup> , 1290 <sup>1</sup> , 3000 <sup>2</sup> , 3100, 3110 <sup>3</sup> , 3111 <sup>3</sup> , 3112 <sup>3</sup> , 3113, 3115 <sup>3</sup> , 3116 <sup>3</sup> , 3119 <sup>3</sup> , 3120, 3121, 3122, 3123, 3124, 3125, 3129, 3130, 3131 <sup>3</sup> , 3132 <sup>1</sup> , 3139 <sup>1 or 3</sup> , 3150, 3190, 3900 <sup>2</sup> , 6100 <sup>4</sup> , 6120 <sup>5</sup> , 6130 <sup>6</sup> , 6140 <sup>5</sup> , 6190 <sup>4</sup> , 6200 <sup>7</sup> , 6210 <sup>8</sup> , 6230 <sup>8</sup> , 6290 <sup>7</sup> , 7300 <sup>3</sup> , 9100 <sup>2</sup> , 9200 <sup>2</sup>
Salt Waste	3000 <sup>2</sup> , 3140, 3141, 3142, 3143, 3149, 3900 <sup>2</sup>
Solidified Organic Waste	2000 <sup>1</sup> , 2100 <sup>1</sup> , 2110 <sup>1</sup> , 2120 <sup>1</sup> , 2190 <sup>1</sup> , 2200 <sup>1</sup> , 2210 <sup>1</sup> , 2220 <sup>1</sup> , 2290 <sup>1</sup> , 2900 <sup>1</sup> , 3000 <sup>2</sup> , 3114, 3200, 3210, 3211, 3212, 3213, 3219, 3220, 3221, 3222, 3223, 3229, 3230, 3290, 3900 <sup>2</sup> , 6100 <sup>4</sup> , 6110 <sup>5</sup> , 6190 <sup>4</sup> , 6200 <sup>7</sup> , 6290 <sup>7</sup> , 9100 <sup>2</sup> , 9200 <sup>2</sup>
Soil	4000, 4100, 4200, 4900
Unspecified Metal Waste (Metal Waste Other Than Lead and/or Cadmium)	5000 <sup>9</sup> , 5100, 5110, 5190, 6200 <sup>7</sup> , 6220 <sup>8</sup> , 7000 <sup>10</sup> , 7490, 9300 <sup>10</sup>
Lead/Cadmium Metal Waste	5000 <sup>9</sup> , 5120, 5130, 6200 <sup>7</sup> , 6220 <sup>8</sup> , 7000 <sup>10</sup> , 7200, 7210, 7220, 7400 <sup>11</sup> , 7410 <sup>11</sup> , 7420 <sup>11</sup> , 9300 <sup>10</sup>
Inorganic Nonmetal Waste	5000 <sup>9</sup> , 5200, 5210, 5220, 5230, 5240, 5290
Combustible Waste	5000 <sup>9</sup> , 5300, 5310, 5311, 5312, 5313, 5319, 5320, 5330, 5390
Graphite Waste	5000 <sup>9</sup> , 5340
Heterogeneous Waste	5000 <sup>9</sup> , 5400, 5420, 5430, 5440, 5450, 5490, 6200 <sup>7</sup> , 6220 <sup>8</sup> , 6290 <sup>7</sup>
Filter Waste	5000 <sup>9</sup> , 5410
Excluded Waste Streams <sup>12</sup>	5250, 5350, 6300, 6400, 7100
Unknown Waste <sup>13</sup>	8000, 8100, 8200, 8900

**TABLE 1-2. WASTE MATRIX CODE GROUP NAMES (CONTINUED)**

- <sup>1</sup> Liquid waste streams are assumed to be solidified prior to sending to WIPP. A volume conversion of 2.5:1 is assumed for solidification.
- <sup>2</sup> WMCs 3000, 3900, 9100, and 9200 are placed in "solidified inorganic waste," "salt waste," or "solidified organic waste," depending on the information provided in the MWIR.
- <sup>3</sup> Particulate waste streams are assumed to be solidified prior to sending to WIPP. A volume conversion of 2.5:1 is assumed for solidifying particulate waste.
- <sup>4</sup> WMCs 6100 and 6190 are placed in "solidified organic waste," or "solidified inorganic waste," depending on the information provided in MWIR. Volume conversion is described in footnotes 5 and 6.
- <sup>5</sup> Liquid lab pack waste is assumed to be solidified prior to sending to WIPP. It is assumed that the packing material in lab packs will be low-level waste when the liquid containers are removed. A volume conversion of 2.5:1 is assumed for solidification.
- <sup>6</sup> Solid lab packs are assumed to be solidified prior to sending to WIPP. It is assumed that the packing material in lab packs will be low-level waste when solidifying. Because lab packs have a 3:1 ratio of waste to absorbent material, it is assumed that when the chemicals are removed from the drum and solidified, there will not be a volume increase.
- <sup>7</sup> WMCs 6200 and 6290 are placed in "solidified inorganic waste," "solidified inorganic waste," or "heterogeneous waste" if the waste stream must be solidified. They are placed in "unspecified metal waste," or "lead/cadmium metal waste" if they are primarily nonreactive metal contaminated with reactive metal. Reactive waste streams must be treated prior to shipment to WIPP.
- <sup>8</sup> Waste stream is assumed to be treated prior to shipment to WIPP. Volume change is dependent of the waste stream and treatment.
- <sup>9</sup> WMC 5000 is placed in "unspecified metal waste," "lead/cadmium metal waste," "inorganic nonmetal waste," "combustible waste," "graphite waste," "heterogeneous waste," or "filter waste," depending on the information in MWIR.
- <sup>10</sup> WMC 7000 and 9300 are placed in "unspecified metal waste" or "lead/cadmium metal waste," depending on the information in MWIR.
- <sup>11</sup> WMCs 7400, 7410, 7420, and 7490 are assumed to be drained of liquid and contain only metal waste.
- <sup>12</sup> These waste streams are excluded from disposal in WIPP at this time.
- <sup>13</sup> If adequate information is provided in MWIR, these WMCs are changed. If there is not enough information in MWIR, these waste streams remain as "unknown" and are excluded from disposal in WIPP until characterized.

- The WMCG that the profile represents;
- Listing of the waste streams (represented by waste stream profiles at the site) that are included in the site-specific waste profile, including the waste stream identification and volumes of stored and currently projected waste; and
- Summary of minimum, volume weighted average, and maximum weights of waste material parameters per cubic meter of waste volume (e.g., iron-based metals/alloys, aluminum-based metals/alloys, cellulose, etc.).

Figure 1-3 provides an example of a blank site-specific waste profile form. The methodology and assumptions for developing site-specific waste profiles are provided in Chapter 4 and printouts of site-specific waste profiles are provided in Appendix F.

**WIPP Waste Profile** – The WIPP waste profile represents a summary of TRU waste at all DOE TRU waste generator/storage sites that have an identical WMCG. Examples of information included in a WIPP waste profile are:

- Profile name;
- The WMCG that the profile represents;
- Listing of the DOE TRU waste sites (represented by the same WMCG) that are included in the WIPP waste profile, including the name of the DOE TRU waste site and volumes of stored and currently projected waste for each site for the particular WMCG represented; and
- Summary of minimum, volume weighted average, and maximum weights of waste material parameters per cubic meter of waste volume (e.g., iron-based metals/alloys, aluminum-based metals/alloys, cellulose, etc.).

Figure 1-4 provides an example of a blank WIPP waste profile form. The methodology and assumptions for developing WIPP waste profiles are provided in Chapter 5.

#### 1.3.4 Database Terminology

**Mixed Waste Inventory Report (MWIR)** – The MWIR refers to the latest release of information from the MWIR database that supports requirements under the Federal Facilities Compliance Act (FFCA) of 1992 (Public Law 102-386). The latest version of the MWIR documentation/files is *Distribute [Distribution] of Phase II Mixed Waste Inventory Report Data*, dated May 17, 1994 (DOE, 1994a). This information replaces the MWIR Phase I release (DOE, 1994c).

**Integrated Data Base (IDB)** – The IDB refers to the latest version of the *Integrated Data Base for 1993: U.S. Spent Fuel and Radioactive Waste Inventories, Projections, and Characteristics* (DOE, 1994b).

**Nonradionuclide Inventory Database (NID)** – The NID is the database of nonradionuclide constituents in the TRU inventory that was originally developed by International Technology Corporation (IT) during 1988/1989 in support of the SNL/NM PA effort. A summary of the database was transmitted to SNL/NM in a letter report dated May 1989 (WIPP PA, 1991). A

## SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES

30-Jun-94

<u>WASTE PARAMETERS FOR Heterogeneous Waste</u>			
<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>

<u>Material Parameters (kg/m3)</u>		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel			
	Plastic			

Figure 1-3. Blank Site-Specific Waste Profile Form

**WIPP CONTACT HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
<b><u>CH TOTALS:</u></b>			

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel			
	Plastic			

Figure 1-4. Blank WIPP Waste Profile Form



copy of the NID waste stream information used in the WTWBIR is included in Appendix D.

In cases where additional information/process knowledge was used that is not contained in the three databases just mentioned, the source of the information will be included in the text.

### 1.3.5 Other Terminology

**Waste Material Parameter** – This is a waste material that occurs in TRU waste that is an input parameter into one or more current SP or PA models, an SP or PA model under development, a potential future model, or is required to adequately describe the waste form (see Section 3.3.1). The 10 waste material parameters and packaging materials that are defined and included in the WTWBIR are:

- Inorganics
  - Iron-based metals/alloys
  - Aluminum-based metals/alloys
  - Other metals
  - Other inorganic materials
- Organics
  - Cellulosics
  - Rubber
  - Plastics
- Solidified Materials
  - Inorganic matrix
  - Organic matrix
- Soils
- Packaging Materials
  - Steel
  - Plastic or lead

Definitions for these waste material parameters can be found in Chapter 6.

## 1.4 OBJECTIVES

The objectives of the WTWBIR are threefold:

1. **Establish a methodology for grouping wastes of similar physical and chemical composition.** A methodology for grouping wastes of similar physical and chemical properties into "waste profiles" will provide a common frame of reference for discussion of TRU waste issues with regulatory organizations.
2. **Define the anticipated disposal inventory of TRU wastes destined for WIPP.** The anticipated inventory of CH-TRU and RH-TRU wastes is defined as the sum of the existing volumes of stored and currently projected waste streams at each of the TRU waste generator/storage sites. Because the existing stored and currently projected waste streams do not contain sufficient volume (CH-TRU waste only) to fill the allowed capacity of WIPP, calculated:  $6.2 \times 10^5 \text{ ft}^3$  ( $\sim 1.76 \times 10^5 \text{ m}^3$ ) (Public Law 102-579, 1992), scaling of the CH-TRU waste anticipated inventory is necessary to attain the WIPP design limit. Additionally,

there is a high uncertainty in and a current lack of data on waste produced by decontamination and decommissioning (D&D) and environmental restoration (ER) activities. Therefore, the anticipated inventory has been scaled to the WIPP capacity (disposal inventory). The scaling of the inventory in future revisions of the WTWBIR will be derived from the best available data and assumptions.

3. **Calculate the disposal inventory in terms of waste material parameters.** Several waste material parameters (e.g., iron-based metals/alloys, rubber, plastics, etc.) have been identified as being potentially significant in relation to the performance of the WIPP repository (see Table 1-1). Calculating the WIPP disposal inventory in terms of these parameters provides input for the SP and PA calculations and sensitivity analyses needed to determine compliance with federal standards.

## 1.5 BASELINE INVENTORY UPDATES

The WTWBIR represents the best available TRU waste inventory information in support of the WIPP Project. It is anticipated that the WTWBIR will be updated periodically. This update cycle will be modified based on the availability of additional waste information or the data needs of the WIPP Project.

## 1.6 DOCUMENT ORGANIZATION

The WTWBIR is organized into chapters of text, figures, tables and supporting appendices. It flows from specific, detailed TRU waste information (provided by the TRU waste generator/storage sites) to the development and description of waste profiles and waste material parameters. The contents of remaining chapters in this document are summarized in the following:

- Chapter 2 discusses the three main databases and the methodology used to define the TRU waste disposal inventory.
- Chapter 3 describes the correlation of individual waste streams among the three databases and outlines the methodology and assumptions used to derive waste stream profiles.
- Chapter 4 describes the WMCGs used to combine waste stream profiles with similar physical and chemical properties to provide site-specific waste profiles, and provides estimations of non-mixed TRU waste volumes derived from the waste stream profiles identified in Chapter 3.
- Chapter 5 discusses the methodology for "rolling up" the site-specific waste profiles into WIPP waste profiles. Total weights per volume of waste material parameters are provided for each of the WIPP waste profiles. Radionuclide totals in curies are provided from site-specific data.
- Chapter 6 rolls up the waste material parameter information assigned at the waste stream profile level in Chapter 3 to obtain parameter totals. These totals are presented as parameter weights per volume.

- Chapter 7 lists references cited in the WTWBIR.
- Several appendices also are provided to either present more detailed waste inventory information or to describe the methodology in more detail. The appendices are provided in Book 2 of this WTWBIR.

## CHAPTER 2

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**Information Only**

## 2. TRU WASTE DISPOSAL INVENTORY

### 2.1 INTRODUCTION

The TRU waste disposal inventory is derived from existing information on waste, which has been provided by the DOE TRU waste generator/storage sites and is predominately based on process knowledge. This chapter is designed to assist the reader by describing the existing waste information used to derive the inventory and developing the methodology used to correlate and combine the existing data into a WIPP disposal inventory.

### 2.2 SOURCES OF TRU WASTE INFORMATION

Several sources of information have been used to compile the WTWBIR. The three primary databases used are: (1) the MWIR (DOE, 1994a) (see Appendix H), (2) the IDB (DOE, 1994b), and (3) the NID (summarized in Appendix D). Although the bulk of the information used to compile the inventory was extracted from these three databases, several other resources also were used. These are the *Transuranic Package Transporter-II (TRUPACT-II) Content Codes (TRUCON)* (DOE, 1992), the *No-Migration Variance Petition (NMVP)* (DOE, 1990), and the draft *RCRA Part B Permit Application* (DOE, 1993a). These sources are discussed further in the following sections.

#### 2.2.1 Mixed Waste Inventory Report

The FFCA of 1992 (Public Law 102-386, 1992; Section 105) required that the DOE, within 180 days of enactment of the FFCA, submit to the EPA Administrator and the governor of each state in which the DOE stores or generates mixed wastes a report that contains:

- National inventory report of all mixed wastes, regardless of the time they were generated, on a state-by-state basis and
- National inventory of mixed waste treatment capacities and technologies.

The FFCA also stipulated specific reporting requirements for each of these inventories. The DOE submitted the six-volume set entitled: *U.S. Department of Energy Interim Mixed Waste Inventory Report: Waste Streams, Treatment Capacities and Technologies*, DOE/NBM-1100, dated April 1993 (DOE, 1993b), to fulfill these requirements. Since issuance of the "interim" report, DOE has requested additional information from the DOE TRU waste generator/storage sites and published two updated reports entitled:

- *Release of Phase I Mixed Waste Inventory Report Data*, dated April 1, 1994 (DOE, 1994c), which includes a data diskette (Version .97B) and the draft *Mixed Waste Inventory Report Data Base System User's Guide*.
- *Distribute [Distribution] of the Phase II Mixed Waste Inventory Report Data*, dated May 17, 1994 (DOE, 1994a), which includes a data diskette (Version 1.00) and the draft *User's Guide for National Data Base System for the Final Mixed Waste Inventory Report* (May 1994).

The waste-stream specific information contained in the Phase II MWIR report is the basis for defining waste streams and building a CH-TRU and RH-TRU waste disposal inventory for

WIPP. The Phase II MWIR report has the following information about each mixed TRU waste stream by generator/storage site:

- Physical and chemical description,
- Retrievably stored and projected inventory volumes (in cubic meters),
- Source of the waste stream (including process descriptions),
- Toxic Substances Control Act (TSCA) constituents,
- Hazardous (EPA) waste codes,
- Radionuclide characterization data (generally qualitative), and
- WMCs for treatability, developed by the DOE to group waste streams with similar physical and chemical properties (see Appendix C).

Although the Phase II MWIR contains fields for all the information listed here, some fields are left blank or limited information is provided by the sites. Volumes, RCRA constituents, and WMCs are provided for each waste stream reported. Generally, the TRU waste generator/storage sites provide some information in the other fields, but its completeness ranges from very detailed to extremely sparse. Source information, TSCA constituents, and radionuclide characterization fields often contain incomplete information or are left blank.

The Phase II MWIR (DOE, 1994a) database is used for this revision of the WTWBIR for mixed TRU waste streams. Idaho National Engineering Laboratory (INEL) non-mixed TRU waste stream information from the Phase I MWIR (DOE, 1994c) is used to define non-mixed waste streams for TRU waste at INEL.

### **2.2.2 Nonradionuclide Inventory Database**

The NID was developed in 1988/1989 by IT for SNL/NM in support of initial PA calculations. This database defines each waste stream that was planned for WIPP disposal in 1989, on which sufficient information existed about the waste materials. Most waste streams in the NID also are described in detail in the TRUCON document (DOE, 1992). The NID contains estimated numerical information (minimum, maximum, and average weights), based on process knowledge and limited visual examination (a qualitative technique that involves human judgment) on many different types of waste materials for each waste stream included in the database.

The waste material parameters listed in Section 1.3.5 occur in the NID and are the emphasis of the waste stream profile. Although these waste material parameters are deemed important for SP and PA model evaluations, their effect on repository performance may prove to be insignificant as determined by sensitivity analyses.

The NID information was summarized in 1989 for inclusion in the PA calculations (WIPP PA, 1991). Most of the information (except that for the waste material parameters) has been superseded by the MWIR database. The waste material parameter information used to define the WTWBIR is presented in Appendix D.

### 2.2.3 Integrated Data Base

In the IDB, radionuclide inventory is reported at the top level only (at the TRU waste site level). The IDB is published by Oak Ridge National Laboratory (ORNL) for the DOE. The ORNL assembles radioactive waste inventories provided by DOE TRU waste generator/storage sites. The IDB contains site inventory estimates for retrievably stored and currently projected waste (i.e., waste projections are made for 1993 until the year 2020). This database does not report by waste stream, but rather, by the total inventory at each DOE site. The IDB also contains the radionuclide isotopic distribution for the waste generated/stored at each site. Because consistent reporting is not available at the waste stream level in the MWIR, the radionuclide information in the IDB is the basis for the WTWBIR inventory for radionuclides.

### 2.2.4 Other Sources of TRU Waste Information

The three main databases described here in Section 2.2.1, MWIR (DOE, 1994a); Section 2.2.2, IDB (DOE, 1994b); and Section 2.2.3, NID (WIPP PA, 1991), represent the bulk of the data used to build the WIPP disposal inventory. Table 2-1 lists the information that was used from each database to compose the waste stream profiles for each TRU waste stream in the MWIR. In addition to the database records, several other resources have been used. These include:

- TRUCON (DOE, 1992) – Waste streams that are included in TRUCON have been indicated by recording the designation in the waste stream profile for each MWIR waste stream (see Appendix E).
- NMVP (DOE, 1990) – Waste streams that are covered by the NMVP have been indicated by recording the designation in the waste stream profile for each MWIR waste stream (see Appendix E).
- RCRA Part B Permit Application (DOE, 1993a) – Waste streams across the DOE TRU system have been summarized in the WIPP RCRA Part B Permit Application by general categories. The name of these general categories has been included on the waste stream profile for each MWIR waste stream (see Appendix E).

## 2.3 METHODOLOGY FOR DEVELOPMENT OF DISPOSAL INVENTORY

Development of the WIPP TRU waste disposal inventory is accomplished by a series of steps starting with the individual waste streams identified in the MWIR (DOE, 1994a). These waste streams are grouped together, based on similar physical and chemical properties, into common "waste profiles," which should facilitate discussions concerning the disposal waste inventory with regulatory agencies and stakeholders. The waste profiles also contain information on waste material parameters that could affect the performance of the WIPP repository and that, therefore, may be direct inputs to SP and PA models. A more detailed explanation of these processes is found in the following sections.

**TABLE 2-1. SOURCES OF INFORMATION FOR WASTE STREAM PROFILES**

Mixed Waste Inventory Report <sup>1</sup>	Nonradionuclide Inventory Database <sup>2</sup>	Integrated Data Base <sup>3</sup>
Definition of Individual Waste Streams, Waste Stream IDs, and Item Description Codes (IDCs)	Waste Material Parameter Information: Minimum, Average, and Maximum Weight Estimates/Unit Volume	Volumes of Total TRU Waste: Stored and Projected <sup>4</sup>
Field Office		
RH/CH		
Waste Stream Name, Waste Description		
Waste Matrix Code		
Volumes of Mixed TRU Waste: <sup>4</sup> Stored and Projected		
Hazardous Waste Codes (EPA Codes)		

<sup>1</sup> Phase II MWIR (DOE, 1994a).

<sup>2</sup> A summary of the database output is provided as Appendix D.

<sup>3</sup> Current version is Revision 9, published March 1994.

<sup>4</sup> For INEL, the Phase I MWIR also contains non-mixed TRU waste volumes.

### 2.3.1 Estimation of Anticipated Inventory

The anticipated inventory is the sum of the stored and currently projected wastes including the non-mixed waste that is **not** included in the MWIR (DOE, 1994a). The methodology for deriving the anticipated inventory is as follows:

- Approximately 260 individual TRU waste streams are defined in the Phase II MWIR (DOE, 1994a). Each of these waste streams is identified in the WTWBIR as a waste stream profile (see Appendix E). These waste stream profiles were developed using information from the sources listed in Section 2.2; these profiles are the lowest tier of information in the WTWBIR. Five TRU waste streams are used throughout this report to illustrate the methodology for this process.
- Each waste stream in the MWIR has been assigned a WMC by the TRU waste generator/storage site that defines the general physical and chemical properties of the waste. The WMC is located in the upper portion of each waste stream profile. The assignment of the WMC is based on DOE guidance, which can be found in Appendix C.
- Waste streams at each TRU waste generator/storage site with similar WMCs can be grouped together into a site-specific waste profile. The methodology for grouping waste streams is shown in Figure 2-1. The grouping of individual waste stream profiles into a site-specific waste profile is based on the similar physical and chemical properties of the waste streams and how that information is used in the SP and PA models. In the



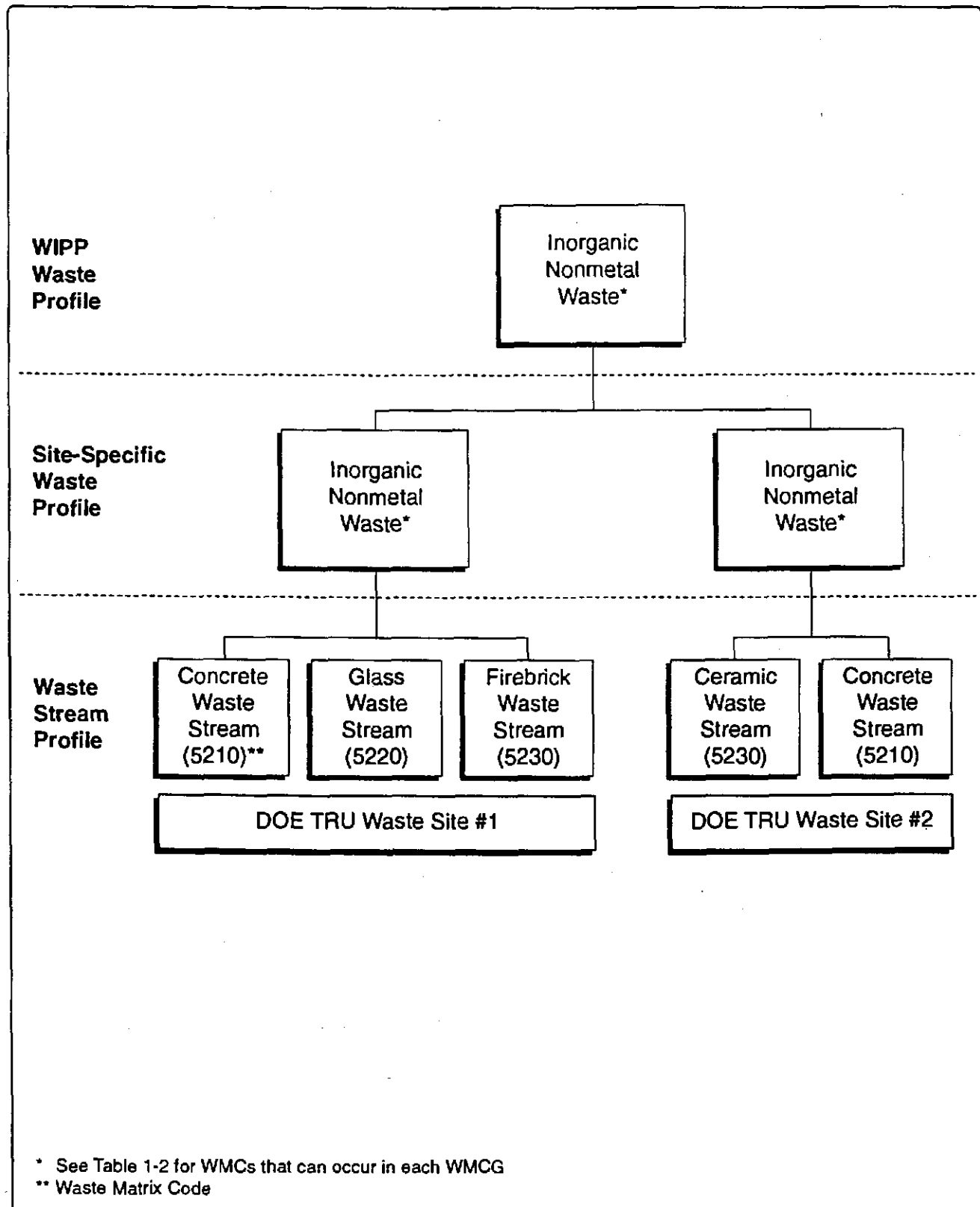


Figure 2-1. Schematic of Waste Stream Profile Methodology

example in Figure 2-1, due to their similar mechanical properties, concrete waste, glass waste, firebrick waste, and ceramic waste mainly influence the estimation of porosity and permeability in the SP and PA calculations. Therefore, the three waste streams at DOE TRU Waste Site #1 and the two at DOE TRU Waste Site #2 can be grouped together at each site based on similar physical and chemical properties and placed into the site-specific waste profile "inorganic nonmetal waste," with the WMCG defined in Table 1-2.

A more detailed description of the methodology for grouping waste stream profiles into site-specific waste profiles is presented in Section 4.3 and is illustrated with examples of five actual TRU waste streams. There are a maximum of 11 possible CH-TRU and RH-TRU site-specific waste profiles at any generator/storage site; however, most sites have fewer profiles due to differences in waste segregation practices. All the site-specific waste profiles for TRU waste are provided in Appendix F.

- Site-specific waste profiles from different waste generator/storage sites that contain the same WMCG (e.g., inorganic nonmetal waste for the example in Figure 2-1) can be combined together into a WIPP waste profile similar to that presented in Figure 2-1. As with site-specific waste profiles, there can only be a maximum of 11 possible WIPP waste profiles for CH-TRU or RH-TRU waste.
- Definition of the anticipated WIPP inventory is based on summing volumes of waste from each DOE TRU waste generator/storage site by site-specific waste profiles to synthesize the overall WIPP waste profiles. In the example in Figure 2-1, the inventories of inorganic nonmetal waste for Site #1 and Site #2 are added together to define a WIPP waste profile. To define the anticipated total WIPP inventory for inorganic nonmetal waste, all site-specific waste profiles for this waste category are combined to determine the WIPP waste profile for inorganic nonmetal waste.
- The anticipated inventory of TRU wastes for disposal at WIPP is determined from stored and currently projected waste streams as identified in the MWIR (DOE, 1994a) and/or the IDB (DOE, 1994b). The MWIR reports only volumes of mixed TRU waste. To estimate the volume of non-mixed TRU waste, the MWIR volumes by TRU waste site were subtracted from the 1993 IDB total volumes. The resultant total, which was always positive, was assumed to be non-mixed TRU waste.

In the Phase I MWIR (DOE, 1994c), INEL reported non-mixed TRU waste streams. These waste streams and their associated volumes have been used instead of the extrapolation of non-mixed TRU waste from the difference in volume of the MWIR and IDB.

Because the non-mixed TRU waste volumes are derived by the difference between the IDB and the MWIR, there are no WMCs associated with these volumes. Generally, mixed TRU and non-mixed TRU waste streams have similar physical and chemical properties. Based on this assumption, the non-mixed TRU waste was proportionally distributed among the predominant WMCs for each site using the combined stored and projected volumes. Therefore, the volumes reported in the site-specific waste profiles include both mixed and non-mixed TRU wastes. Appendix F provides a percentage breakout of mixed TRU and non-mixed TRU waste by site and WMCGs.

### 2.3.2 Estimation of Scaling Factor

Because the existing stored and currently projected waste streams, including non-mixed TRU waste, do not contain sufficient volume to fill the allowed capacity of WIPP,  $6.2 \times 10^6 \text{ ft}^3$  ( $\sim 1.76 \times 10^5 \text{ m}^3$ ) (Public Law 102-579, 1992), scaling of the CH-TRU inventory is necessary to attain the WIPP capacity. The scaling is accomplished by:

- The anticipated inventory (as defined in Section 1.3.1) consists of 11 overall CH-TRU and RH-TRU WIPP waste profiles based on the physical and chemical properties of the waste streams. The sum of the anticipated inventory is subtracted from the allowable WIPP inventory ( $1.76 \times 10^5 \text{ m}^3$ ) and divided by the anticipated inventory, then added with 1:

$$\frac{1.8\text{E} + 05 \text{ m}^3 \text{ (design inventory)} - \text{anticipated inventory}}{\text{anticipated inventory}} + 1 = \text{scaling factor}$$

The scaling of the inventory, in future revisions of the WTWBIR, will include volumes of waste anticipated from D&D and ER activities as these estimates are made available.

### 2.3.3 Estimation of Disposal Inventory

The disposal inventory is the total inventory to be used in SP and PA calculations. To calculate the disposal inventory by WMCG, the anticipated inventory is multiplied by the scaling factor for each WMCG and summed together. See Section 5.3 for further details.

### 2.3.4 Estimation of Waste Material Parameters

Some waste materials that exist in TRU waste may degrade, to some extent, over the 10,000-year period for performance modeling (WIPP PA, 1993). Some waste may produce gas by either chemical, microbial, or radiolytic degradation processes. The WIPP SP and PA models will evaluate the impacts of these processes on repository performance. The waste material parameters that are direct inputs into the SP process and PA models or potential models being considered or developed have been included in the WTWBIR and are documented in Section 6.2. These parameters will be evaluated in the SP process and PA modeling to determine the sensitivity of each parameter to repository performance.

Each TRU waste stream identified in the MWIR (DOE, 1994a) was reviewed. An example of a Phase II MWIR printout can be found in Appendix H. The item description codes (IDCs) and general waste information in the MWIR were compared with the NID (see Appendix D). The comparison of the MWIR and NID information on a waste stream basis resulted in one of two scenarios:

1. The MWIR waste stream correlates directly with NID waste stream.
2. The MWIR waste stream does not correlate directly with NID waste stream.

If a direct match was made between a waste stream in the MWIR and a waste stream in the NID (i.e., both had the same IDC), the waste parameter information from the NID was used in the waste stream profile for the MWIR waste stream. This information included the minimum, average, and maximum quantities of waste material parameters reported within the waste stream. If there was not a direct match, a comparison of the general waste information

between the MWIR and the NID was used to assign a waste material parameter distribution from another waste stream in the NID to the one under consideration in the MWIR to produce the waste stream profile. A more detailed explanation of the methodology used for assignment of waste material parameter information is provided in Section 3.3 and Appendix J.

## CHAPTER 3

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**Information Only**

### 3. WASTE STREAM PROFILE METHODOLOGY

#### 3.1 INTRODUCTION

The lowest tier of information in the WTWBIR is the waste stream profile, which documents specific information for each separate waste stream identified in the MWIR at each DOE TRU waste generator/storage site. In order to develop a waste characterization package for each waste stream at each site, it was necessary to correlate the information between the MWIR, NID, and IDB. Because these databases were generated at different times to meet different requirements, the nomenclature, waste description codes, waste groupings, and waste streams can be different in each database.

#### 3.2 WASTE STREAM PROFILE DESCRIPTION

Each DOE waste stream was reviewed and, using the MWIR (DOE, 1994a) waste streams as the basis, those which were identified as acceptable for disposal under the WIPP WAC (DOE, 1991) were developed into waste stream profiles. Figure 3-1 provides an example TRU waste stream profile for a waste stream at INEL. In addition to presenting the quantity of waste material parameters in each DOE waste stream, the waste stream profile also provides a cross-reference table (top of the waste stream profile form) to list the different nomenclature used in previously generated DOE documents to identify the waste stream. Appendix K provides a cross correlation table for an MWIR waste stream with the NMVP, the draft *RCRA Part B Permit Application*, and the TRUCON. Table 3-1 lists the fields utilized on the waste stream profile, the sources of the information, and a short explanation of the data located in a particular field. A complete set of the waste stream profiles is provided in Appendix E.

In development of the MWIR, DOE directed the TRU waste generating/storage site to append their hazardous waste codes (EPA codes) to further define the waste in order to develop an appropriate treatment technology. These code designations and descriptions are presented in Appendix M. For example, D003 is defined by EPA as reactive. DOE further defined this code as D003A (reactive cyanide), D003B (reactive sulfides), D003C (explosives), D003D (water reactives), and D003E (other reactives). Other EPA codes are further defined as listed in Appendix M.

There are three waste volumes reported in the waste stream profiles: retrievable, projected, and total. On some waste stream profiles there can be a rounding error. If retrievable plus projected do not equal the total, it is due to a rounding error.

#### 3.3 WASTE STREAM PROFILE METHODOLOGY AND ASSUMPTIONS

##### 3.3.1 Assignment of Waste Material Parameters to MWIR Waste Stream

Each waste stream described in the MWIR (DOE, 1994a) is evaluated to determine the physical and chemical properties of the waste. This information is then compared with the NID (Appendix D). As a result of this comparison, two scenarios are possible (see Appendix J):

1. **MWIR Waste Stream Correlates Directly with NID Waste Stream** – If the MWIR waste stream has a direct correlation with a NID waste stream (i.e., they both have the same

## WASTE STREAM PROFILES (CONTINUED)

29-Jun-94

DATABASE WS ID	IN-W169	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	COMBUSTIBLES (TRU): DRY PAPER AND RAGS				
NO MIGRATION VARIANCE PETITION	ID 216				
WASTE MATRIX CODE - Site	5440	WIPP PART B APPLICATION	COMBUSTIBLES		
- Group	Heterogeneous Waste		TRUCON ID 216		

IDC's  
 Site ID-EGG-114T-330  
 Assigned RF-831

**WASTE VOLUMES (cu. m.)**

Retrievable	5775
Projected	0
<b>Total</b>	<b>5775</b>

**EPA CODE(s)**

F001
D008A
D008C
U022
D029
F001
F001
F003
F001
F003
F001
F005
F005A
F002

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	4.23	1.10	0.00
	<b>Organics</b>			
	Celulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Figure 3-1. Example of TRU Waste Stream Profile from Idaho National Engineering Laboratory

IDC), the waste parameter information from the NID is placed on the waste stream profile for that particular waste stream.

2. **MWIR Waste Stream Does Not Correlate with NID Waste Stream** – If the MWIR waste stream does not have a direct correlation with a NID waste stream (i.e., IDCs do not match), the Waste Stream Description (See Section 2.2 in Appendix H) and the Specific Matrix Constituents (See Section 4.2 in Appendix H) are examined to determine the physical and chemical properties of the waste stream. Based on that information, a NID waste stream is found that closely approximates the MWIR waste stream description. The waste material parameter data from the similar NID waste stream are assigned to the particular waste stream profile.

### 3.3.2 Assignment of WMC to MWIR Waste Stream

The DOE TRU waste generator/storage sites have assigned an overall WMC to each waste stream based on the current form of the waste (see Section 4.1 in Appendix H). The WIPP Project has developed the WIPP WAC (DOE, 1991) for any waste packages to be shipped to WIPP to ensure the safe handling and emplacement in the WIPP. In general, the waste forms acceptable for emplacement in WIPP are described in Table 1-2. For the purpose of this document, waste streams that are in a physical or chemical form that is unacceptable for WIPP disposal are assumed to be processed to meet WIPP WAC. To accomplish the grouping of WMCs, the waste streams were evaluated as follows:

- Documented physical and chemical properties were revised as described in the MWIR database.
- If the waste stream documentation was sufficient, a treatment was assumed for the waste stream (e.g., solidification of inorganic liquids [1000 series] or organic liquids [2000 series]) and grouped with similar WMCs. Other waste streams in the 6000, 7000, 8000, and 9000 series have also been grouped with the 3000, 4000, or 5000 series using similar methodology to address any waste characteristics that would be unacceptable for emplacement in WIPP. Some sites have reported "unknown" (e.g., WMC 8900) for some waste streams. In a few cases, WMCs have been assigned through expert judgement to the waste stream when sufficient information has been included in the waste stream description. Any waste streams that have been changed from "unknown" to another WMC have been documented on the waste stream profiles. Those waste streams that cannot be placed in a new WMC have been grouped together under the WMC 8900. The "unknown" waste streams are documented as part of the WIPP inventory, but are not used in any of the scaling of TRU waste volumes necessary to fill WIPP to its design capacity. "Unknown" wastes will have to be characterized and may require treatment prior to emplacement in WIPP.
- The TRU waste generator/storage sites have identified several waste streams that are regulated under the TSCA (i.e., containing asbestos or polychlorinated biphenyls [PCBs]). Because the concentration of the asbestos and/or PCBs is unknown, it is assumed that these waste streams cannot be accepted at WIPP under the proposed draft WIPP RCRA Part B Permit Application. These waste streams are summarized in Table 3-2 and are not included in the WTWBIR.



**TABLE 3-1. SOURCES OF INFORMATION USED IN WASTE STREAM PROFILES**

INFORMATION FIELD	SOURCE OF INFORMATION	EXPLANATION
Data Base WS ID	MWIR Database	Unique identification number for waste stream in MWIR database
Handling: RH/CH	MWIR Database	Identifies whether waste stream is classified as CH or RH
Field Office	MWIR Database	Identifies DOE field office responsible for management of waste streams
WS Name	MWIR Database	Name of waste stream provided by TRU waste site
NMVP	NMVP, Table 2-1	Provided as cross reference to waste streams included in the NMVP
WMC - Site	MWIR Database	WMC for waste stream provided by the waste generator/storage sites
WMC - Group	MWIR Database	Groups WMCs with similar chemical and physical characteristics
WIPP Part B Permit Application	WIPP draft RCRA Part B Permit Application, Waste Analysis Plan, Revision 3	Provided as cross reference to waste streams in the WIPP draft RCRA Part B Permit Application
TRUCON	TRUCON	Provided as cross reference to waste streams in the TRUCON
Site IDC	MWIR Database	Waste stream identification at site
Assigned IDC	TRUCON	IDC assigned to correlate the MWIR database to the NID
Waste Volumes	1993 IDB and/or MWIR Database	Provides estimates of retrievable stored and projected volumes of TRU and mixed TRU wastes, if available
Waste Parameters (paper, plastic, metal...)	NID	Provides weight estimates of selected waste materials in a particular waste stream
Hazardous Waste (EPA) Codes	MWIR Database	Documents hazardous waste codes (EPA) provided by TRU waste sites and recorded in the MWIR database
Notes/Specific Assumptions	Applicable Reference	Documents any waste-stream specific assumptions

Key: WS = waste stream ID = identification

- All "particulate" wastes have been assumed to be solidified prior to shipment to WIPP.
- Rocky Flats Plant (RFP) residue wastes are included in the MWIR, and are reported at the volumes represented in *Removing Plutonium Residues from Rocky Flats Will Be Difficult and Costly*, a U.S. General Accounting Office (GAO) report to Congress (GAO, 1992). Many of these wastes will have to be repackaged or treated to meet the WIPP WAC, which will result in a volume change.

**TABLE 3-2. TOXIC SUBSTANCES CONTROL ACT (TSCA) TRU WASTE**

UNIQUE WS	WASTE STREAM NAME	ASBESTOS	PCBs
IN-W208	Composite Filters	Yes	No
IN-W209	Composite Filters	Yes	No
IN-W210	Asbestos Waste	Yes	No
IN-W211	Composite Filters	Yes	No
IN-W212	Composite Filters	Yes	No
IN-W213	Composite Filters	Yes	Yes
IN-W309	Absorbed Organic Liquids	Unknown	Yes
RF-W001	Predominantly Metal Waste	No	Yes
RL-W071	Predominantly Metal Waste	Yes	No
RL-W073	Predominantly Metal Waste	No	Yes
RL-W076	Predominantly Combustible Waste	No	Yes
RL-W084	Organic Lab Packs	No	Yes

## CHAPTER 4

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**Information Only**

## 4. SITE-SPECIFIC WASTE PROFILE METHODOLOGY

### 4.1 INTRODUCTION

Waste streams with similar physical and chemical properties can be grouped together using WMCs. For example, the following four waste streams from INEL are identified in Figure 4-1:

- Dry paper and rags (IN-W169);
- Combustible equipment boxes (IN-W203);
- Benelex and Plexiglas (IN-W225); and
- Miscellaneous paper, metal, etc., (IN-W285).

These waste streams are all "heterogeneous waste" and can be combined into one site-specific waste profile because it is assumed that for long-term compliance purposes (i.e., SP and PA modeling inputs), all four waste streams have essentially the same physical and chemical properties. At INEL, there are additional waste streams grouped under the "heterogeneous waste" profile; but only these four have been included to simplify the example.

For the other site example identified in Figure 4-1, the combustibles waste stream profile RF-W012 is the only one that occurs in the "heterogeneous waste" classification and is, therefore, placed under that site-specific waste profile for the RFP. This methodology of grouping waste streams by WMCs is similar at each DOE TRU waste generator/storage site.

### 4.2 SITE-SPECIFIC WASTE PROFILE DESCRIPTION

A site-specific waste profile is developed at each of the TRU waste generator/storage sites for each of the WMCGs (listed previously in Table 1-2) that have individual waste streams at each site. These site-specific waste profiles provide a rollup of the waste material parameter and volume information found in the waste stream profiles for each site.

### 4.3 SITE-SPECIFIC WASTE PROFILE METHODOLOGY

The general methodology for combining waste streams at a site into WMCGs is similar to that shown in Figure 4-1. The WMCGs are then converted directly into site-specific waste profiles to be used to build the WIPP disposal inventory. An example site-specific waste profile is presented in Figure 4-2 using the IN example waste streams from Figure 4-1. Table 4-1 lists the sources of information for site-specific waste profiles. All site-specific waste profiles are provided in Appendix F.

#### 4.3.1 Grouping of WMCs

For the purposes of this document, 11 WMCGs have been identified. The WMCGs were developed by combining waste streams with similar physical and chemical properties by using WMCs as defined in the *DOE Waste Treatability Groups Guidance* (see Appendix C) and after reviewing the individual waste stream descriptions in the MWIR. Table 1-2 (in Chapter 1) displays the WMCGs and associated WMCs.

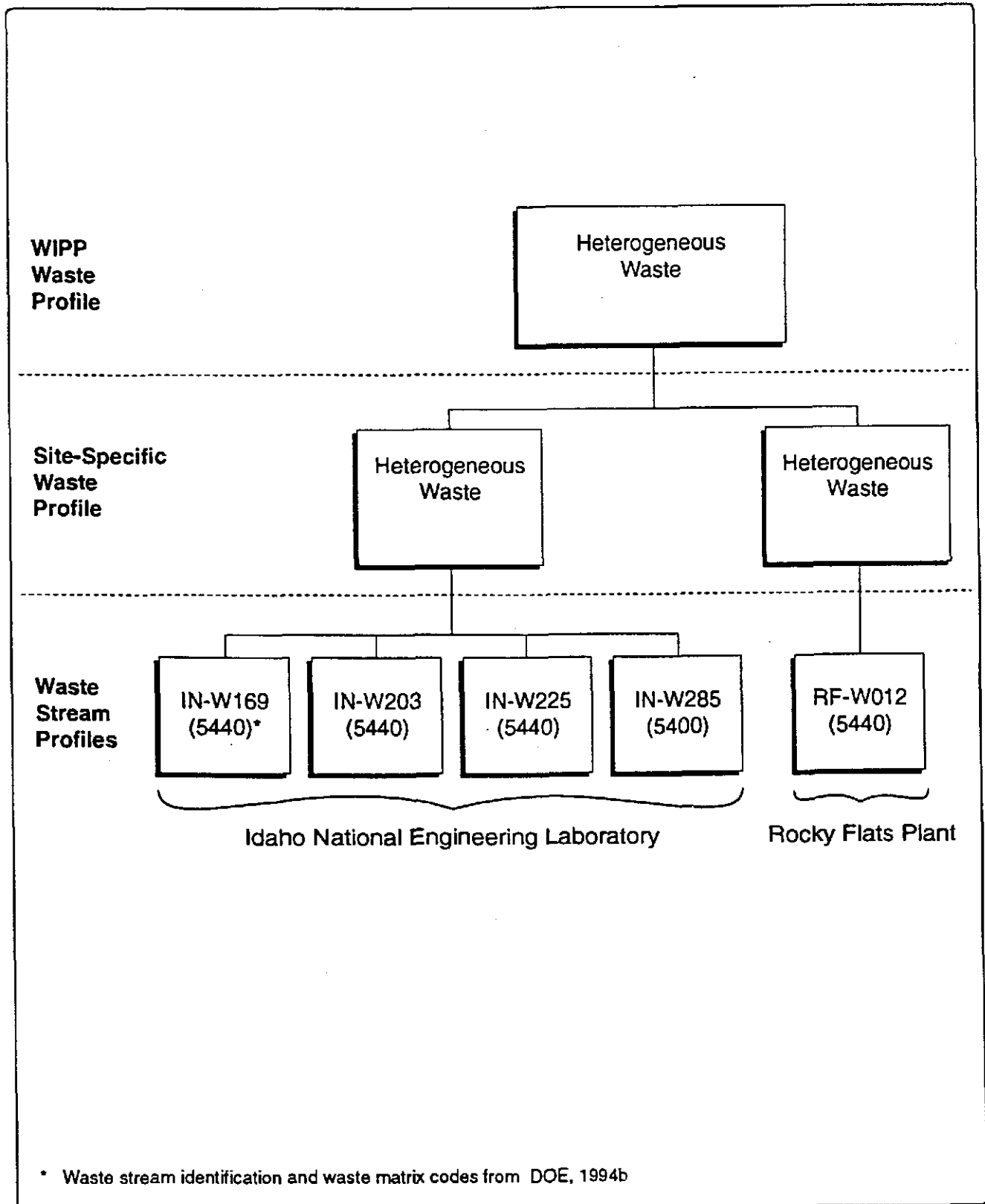


Figure 4-1. Waste Profile Methodology for Example Waste Streams

## SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES

30-Jun-94

<u>WASTE PARAMETERS FOR Heterogeneous Waste</u>			
<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
IN-W283	1.06	0.00	1.06
IN-W281	370.89	0.00	370.89
IN-W278	13.95	0.00	13.95
IN-W346	14.59	0.00	14.59
IN-W163	0.85	0.00	0.85
IN-W351	1.48	0.00	1.48
IN-W334	5.51	0.00	5.51
IN-W259	58.84	0.00	58.84
IN-W285	53.15	0.00	53.15
IN-W269	25.86	0.00	25.86
IN-W169	5774.64	0.00	5774.64
IN-W199	1.27	0.00	1.27
IN-W306.3	3465.00	0.00	3465.00
IN-W302	106.00	0.00	106.00
IN-W186	2695.14	0.00	2695.14
IN-W187	0.21	0.00	0.21
IN-W291	770.09	0.00	770.09
IN-W189	6.15	0.00	6.15
IN-W172	165.57	0.00	165.57
IN-W225	22.20	0.00	22.20
IN-W171	3.59	0.00	3.59
IN-W203	79.89	0.00	79.89
IN-W204	1.91	0.00	1.91
IN-W176	0.42	0.00	0.42
IN-W289	25.36	0.00	25.36
IN-W285	64.90	0.00	64.90
IN-W329	1.27	0.00	1.27
IN-W271	0.42	0.00	0.42
IN-W197	778.34	0.00	778.34
	<b>14608.56</b>	<b>0.00</b>	<b>14608.56</b>

<u>Material Parameters (kg/m3)</u>		<u>Max</u>	<u>Average</u>	<u>Min</u>
Inorganics	Iron-based Metals/Alloys	1716.35	41.40	0.00
	Aluminum-based Metals/Alloys	38.22	0.48	0.00
	Other Metals	46.63	0.16	0.00
	Other Inorganic Materials	3072.12	5.20	0.00
Organics	Cellulosics	918.75	100.97	0.00
	Rubber	212.02	9.92	0.00
	Plastics	1060.10	43.83	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix	2.98	0.00	0.00
Soils	Soil	144.23	0.24	0.00
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Figure 4-2. Example of Site-Specific Waste Profile

**TABLE 4-1. SOURCES OF INFORMATION USED IN  
SITE-SPECIFIC WASTE PROFILES**

Information Field	Source of Information	Explanation
DOE TRU Site	MWIR Database	<p>The code for the DOE site. Codes are as follows:</p> <ul style="list-style-type: none"> <li>AL - Ames Laboratory</li> <li>AE - Argonne National Laboratory - East</li> <li>AW - Argonne National Laboratory - West</li> <li>ET - Energy Technology Engineering Center</li> <li>IN - Idaho National Engineering Laboratory</li> <li>KA - Knolls Atomic Power Laboratory - Knolls Site</li> <li>LA - Los Alamos National Laboratory</li> <li>LB - Lawrence Berkeley Laboratory</li> <li>LL - Lawrence Livermore National Laboratory</li> <li>MD - Mound Plant</li> <li>MU - University of Missouri</li> <li>NT - Nevada Test Site</li> <li>OR - Oak Ridge National Laboratory</li> <li>PA - Paducah Gaseous Diffusion Plant</li> <li>RF - Rocky Flats Plant</li> <li>RL - Richland (Hanford) Site</li> <li>SA - Sandia National Laboratories/NM</li> <li>SR - Savannah River Site</li> <li>WV - West Valley Demonstration Project</li> </ul>
WMCG	DOE Waste Treatability Groups Guidance and MWIR Database	Groups waste streams that have similar chemical and physical properties.
Waste Stream Volume	1993 IDB and/or MWIR Database	Provides estimates of retrievably stored, projected, and total volumes of TRU and mixed TRU wastes by waste stream.
Waste Material Parameters	NID	Provides total weight estimates of selected waste materials in a particular WMCG for the entire site.

#### 4.3.2 Assignment of WMCGs to Site-Specific Waste Profiles

Once the waste stream(s) at a particular site have been reviewed and grouped under the appropriate WMCG(s), a site-specific waste profile is developed for each WMCG, using the name of the appropriate WMCG to identify the site-specific waste profile. Although the maximum number of site-specific waste profiles for any given TRU waste generator/storage site is 11 CH and 11 RH, most sites possess fewer.

#### 4.3.3 Estimation of Non-mixed TRU Waste Volumes

The Phase II MWIR (DOE, 1994a) reports only volumes of mixed TRU waste, except for INEL (reported in the Phase I MWIR; DOE, 1994c). To estimate the volume of non-mixed TRU waste (except for INEL), the MWIR volumes by TRU waste site were subtracted from the 1993 IDB total volumes, which report the total TRU and mixed TRU waste volume at each site (DOE, 1994b). The resultant total, which was always positive, was assumed to be non-mixed TRU waste:

$$\text{IDB (TRU and mixed TRU waste)} - \text{MWIR (mixed TRU waste)} = \text{TRU (non-mixed TRU waste)}$$

Because the non-mixed TRU waste volumes are derived from the difference between the IDB total TRU waste volumes and the MWIR total mixed TRU waste volumes per site, there are no WMCs associated with these volumes. Generally, mixed TRU and non-mixed TRU waste streams have similar physical and chemical properties (DOE, 1990).

Based on this assumption, the following example is presented only to illustrate the methodology used at most DOE TRU waste generator/storage sites:

- At a DOE TRU waste generator/storage site, three predominant WMCGs are assumed to occur (i.e., solidified inorganic waste, solidified organic waste, and combustible waste).
- The volume of the three WMCGs is calculated by combining stored and projected volumes of all waste stream profiles under each WMCG.
- For this example, the following partitioning of mixed TRU waste volumes among the WMCGs is assumed: 40 percent solidified inorganic waste, 10 percent solidified organic waste, and 50 percent combustible waste.
- Assuming that the difference between the IDB waste volume and the combined MWIR volume is 200 m<sup>3</sup>, then the non-mixed portion of the inventory would be distributed among the three WMCGs in the same ratio. That is: 80 m<sup>3</sup> (solidified inorganic waste), 20 m<sup>3</sup> (solidified organic waste), and 100 m<sup>3</sup> (combustible waste). The volumes reported in the site-specific waste profiles include the non-mixed TRU waste.

Because of the disparity in available data on the non-mixed volumes of TRU waste, notations will be made on a waste stream basis, indicating which method was used to arrive at the non-mixed volume of the TRU waste. Appendix F includes tables that define the percentages of the WMCG that is TRU and mixed TRU waste.



## CHAPTER 5

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**Information Only**

## 5. WIPP WASTE PROFILE METHODOLOGY

### 5.1 INTRODUCTION

The WIPP waste profiles are the highest tier of information in the WTWBIR. Site-specific waste profiles with the same WMCGs (see Table 1-2) can be combined across the TRU waste generator/storage sites into what is defined as an overall WIPP waste profile.

### 5.2 WIPP WASTE PROFILE METHODOLOGY

As described in chapters 3 and 4, each waste stream from each TRU waste generator/storage site is defined in a waste stream profile, then grouped by site WMCGs into site-specific waste profiles. These site-specific waste profiles are then rolled-up into WIPP waste profiles by combining identical WMCGs from all the TRU waste generator/storage sites. For example, all site-specific waste profiles for heterogeneous waste (see Table 1-2) can be grouped together to help generate the WIPP waste profile, "heterogeneous waste." The WIPP waste profiles are presented in Figures 5-1 through 5-17 at the end of this chapter.

### 5.3 WIPP WASTE PROFILE ROLL-UPS

To illustrate the methodology for grouping similar site-specific waste profiles into WIPP waste profiles, the WIPP waste profile for "heterogeneous waste" (based on the five example waste streams shown in Figure 4-1) is provided in Figure 5-4. Table 5-1 lists the sources of information used for the WIPP waste profiles.

TABLE 5-1. SOURCES OF INFORMATION USED IN WIPP WASTE PROFILES

INFORMATION FIELD	SOURCE OF INFORMATION	EXPLANATION
Waste Matrix Code Group (WMCG)	DOE Waste Treatability Groups Guidance and MWIR Database	Groups waste streams that have similar chemical and physical properties
DOE Site Volumes	1993 IDB and/or MWIR Database	Provides estimates of retrievably stored, projected, and total volumes of TRU and TRU mixed wastes by DOE site
Waste Material Parameters	NID Database	Provides weight estimates of selected waste materials in a particular WMCG for the DOE Complex

Using volumes for all the TRU waste streams (including the mixed and non-mixed TRU waste volumes) in the WIPP TRU Waste Baseline Inventory Database, disposal inventory of TRU waste has been developed using the methodology described in this and the preceding

chapters. This inventory is presented in Table 5-2 (by WMCGs) and depicts both the anticipated and disposal inventory volumes.

The anticipated inventory volumes are the sum of the "stored" and "projected" volumes in Table 5-2. The procedure to obtain the disposal inventory is summarized below:

- The total CH-TRU "stored" and "projected" waste volumes are added together ( $8.6 \times 10^4 + 4.1 \times 10^4 = 1.3 \times 10^5 \text{ m}^3$ )
- The "unknown" volume of waste in Table 5-2 ( $4.2 \times 10^3 \text{ m}^3$ ) is subtracted from the anticipated inventory because DOE does not intend to produce any "unknown" waste in the future.
- The "unknown" waste will have to be added back into the total scaled inventory because it is assumed that this waste will be characterized and then shipped to WIPP. The target design volume of CH-TRU waste beyond that identified in the MWIR is decreased by  $4.2 \times 10^3 \text{ m}^3$  ( $1.8 \times 10^5 - 4.2 \times 10^3 = 1.8 \times 10^5 \text{ m}^3$  [there is no significant difference due to rounding]).
- Applying a modified version of the formula given in Section 2.3:

$$\frac{\begin{array}{r} 1.8 \times 10^5 \\ \text{(modified design} \\ \text{inventory)} \end{array} - \begin{array}{r} 1.3 \times 10^5 \\ \text{(modified anticipated} \\ \text{inventory)} \end{array}}{1.3 \times 10^5 \text{ (modified anticipated inventory)}} + 1 \approx 1.4 \text{ (scaling factor)}$$

- Multiply the CH-TRU waste modified anticipated inventory volumes by the scaling factor 1.4 for all the WMCGs, except for the "unknown" waste (which results in the numbers in the fourth column [Scaled Volumes] of Table 5-2).
- Add the CH-TRU waste volumes in the fourth column (Scaled Volumes), including the "unknown" waste, to attain the disposal inventory.

The waste stream volume on a system-wide WMCG basis is increased by 40 percent to account for the difference between the anticipated inventory and the repository design limit. The RH-TRU waste volumes have not been scaled because the volume of anticipated RH-TRU waste inventory already exceeds the design capacity by 21 percent (DOE, 1990).

#### 5.4 RADIONUCLIDE ROLL-UPS

Quantitative radionuclide information is not available on a per-waste-stream basis, as is the nonradionuclide information that is summarized in the waste stream profiles. However, quantitative radionuclide information is available as part of the annual IDB submittal (DOE, 1994b). Table 5-3 contains a summary of the total radionuclide activity (curies) for CH-TRU and RH-TRU waste from information submitted by the DOE TRU waste generator/storage sites (Column 2 of Table 5-2) in support of the data call for the 1993 IDB (DOE, 1994b).

**TABLE 5-2. TRANSURANIC WASTE DISPOSAL INVENTORY FOR WIPP**

Waste Matrix Groups	Stored Volumes m <sup>3</sup>	Projected Volumes m <sup>3</sup>	Scaled Volumes m <sup>3</sup>
<b>Contact-Handled Waste</b>			
Combustible	5.6E+03	3.2E+03	1.2E+04
Filter	2.1E+03	4.6E+02	3.6E+03
Graphite	4.9E+02	0.0E+00	6.8E+02
Heterogeneous	3.4E+04	1.6E+04	6.9E+04
Inorganic Non-Metal	1.1E+03	1.3E+01	1.6E+03
Lead/Cadmium Metal Waste	2.3E+03	2.0E+03	6.0E+03
Salt Waste	7.7E+02	0.0E+00	1.1E+03
Soils	4.6E+03	3.2E+03	1.1E+04
Solidified Inorganics	1.9E+04	1.5E+04	4.8E+04
Solidified Organics	1.3E+03	1.8E+02	2.1E+03
Uncategorized Metal	1.1E+04	3.5E+02	1.6E+04
Unknown <sup>1</sup>	4.2E+03	2.8E+02	4.4E+03
<b>Total</b>	<b>8.6E+04</b>	<b>4.1E+04</b>	<b>1.8E+05</b>
<b>Remote-Handled Waste</b>			
Filter	2.8E+01	2.0E+02	
Heterogeneous	8.0E+02	3.6E+03	
Inorganic Non-Metal	0.0E+00	1.2E+03	
Lead/Cadmium Metal Waste	0.0E+00	8.8E-01	
Solidified Inorganics	6.2E+02	1.4E+03	
Uncategorized Metal	1.5E-01	4.8E+01	
Unknown	5.6E+02	4.2E+02	
<b>Total</b>	<b>2.0E+03</b>	<b>7.0E+03</b>	
<b>Grand Total</b>	<b>8.8E+04</b>	<b>4.8E+04</b>	

<sup>1</sup> The projected "unknown" waste streams are calculated non-mixed TRU waste streams as defined in section 4.3.3. There was not enough information provided in the MWIR from the TRU waste generator/storage sites to assign these streams to a WMCG.

The curie totals for CH-TRU waste have been scaled (1.4) by the same percentage as the volume numbers in Section 5.3 for CH-TRU waste. The scaling will allow SP and PA modeling of the performance of the repository, with the inventory increased to the permitted volume limits. The curie totals presented in Column 4 (for RH-TRU) and Column 3 (for CH-TRU) in Table 5-3 are intended to replace the curie totals used by SNL/NM in the latest published data on waste parameters used in PA (Table 3.3-1 in Sandia WIPP Project, 1992). A more comprehensive listing of radionuclide inventories can be found in Appendix I.

**TABLE 5-3. IDB TOTALS FOR SELECTED RADIONUCLIDES, DECAYED, AND ACCUMULATED TO DECEMBER 1992**

RADIONUCLIDE	CH (REPORTED) CURIES	CH (SCALED) CURIES	RH CURIES
Am 241	4.13E+04	5.78E+04*	8.98E+04
Cf 252	1.09E+02	1.53E+02	1.10E+01
Cs 137	1.98E+03	2.77E+03	2.94E+04
Np 237	1.68E+01	2.35E+01	7.66E-01
Pm 147	5.37E+02	7.52E+02	1.11E+03
Pu 238	5.80E+05	8.12E+05	6.17E+04
Pu 239	1.23E+05	1.72E+05	4.08E+04
Pu 240	1.63E+04	2.28E+04	9.98E+03
Pu 241	3.24E+05	4.54E+05	1.78E+05
Pu 242	4.92E+02	6.89E+02	9.48E-01
Sr 90	1.44E+03	2.02E+03	5.75E+04
Th 232	1.01E-01	1.41E-01	3.33E-01
U 233	2.14E+02	3.00E+02	1.04E+03
U 235	9.94E-01	1.39E+00	3.67E+02
U 238	6.08E+00	8.51E+00	2.30E+00

N/A = RH-TRU curie content was not scaled to fill the WIPP repository. (See Section 5.4 for details.)

\* = Scaling factor is 1.4 from the volumes in Table 5-2.

**ASSUMPTIONS:**

1. Activities reported in 1993 are complete and accurate.
2. Equivalent Pu 239 activities.
3. Calculations to "decay" values reported by DOE sites were performed correctly and assumptions stated in 1993 IDB are valid.
4. Site reporting was done in accordance with the instructions in the 1993 IDB data call.
5. Reported values are scaled to design repository volume for CH-TRU waste only.

**METHODOLOGY:**

The figures presented were arrived at by summing the calculated decayed values in the 1993 IDB from data reported by DOE sites managing TRU waste in response to a formal, nationwide data call.

**WIPP CONTACT HANDLED WASTE PROFILES**

30-Jun-94

**WASTE MATRIX CODE GROUP Combustible Waste**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
IN	557.0	0.0	557.0
MD	57.7	28.1	85.8
RF	287.0	208.6	495.5
SR	4747.1	2986.6	7733.7
<b><u>CH TOTALS:</u></b>	<b>5648.8</b>	<b>3223.3</b>	<b>8872.0</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	4.23	1.10	0.00
<b>Organics</b>	Cellulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Figure 5-1. WIPP CH-TRU Waste Profile for Combustible Waste

Information Only

**WIPP CONTACT HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Filter Waste**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
IN	1424.7	0.0	1424.7
RF	693.1	458.5	1151.5
<b><u>CH TOTALS:</u></b>	<b>2117.8</b>	<b>458.5</b>	<b>2576.2</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
<b>Organics</b>	Other Inorganic Materials	429.82	429.82	0.00
	Cellulosics			
	Rubber			
	Plastics	8.77	8.77	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Figure 5-2. WIPP CH-TRU Waste Profile for Filter Waste

Information Only

**WIPP CONTACT HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Graphite Waste**

	<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
	IN	487.0	0.0	487.0
	RF	0.4	0.0	0.4
<b><u>CH TOTALS:</u></b>		<b>487.4</b>	<b>0.0</b>	<b>487.4</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	1673.08	115.38	0.00
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Figure 5-3. WIPP CH-TRU Waste Profile for Graphite Waste



**WIPP CONTACT HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Heterogeneous Waste**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
IN	14508.6	0.0	14508.6
KA	2.4	0.0	2.4
LA	2041.5	4677.0	6718.5
LL	110.5	809.5	920.0
MU	0.1	0.5	0.6
NT	612.0	0.0	612.0
OR	928.3	609.3	1537.6
RF	1493.6	1187.0	2680.5
RL	8991.7	3116.8	12108.5
SR	5022.4	5813.0	10835.4
<b><u>CH TOTALS:</u></b>	<b>33711.0</b>	<b>16213.0</b>	<b>49924.0</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	4.23	1.10	0.00
<b>Organics</b>	Cellulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Figure 5-4. WIPP CH-TRU Waste Profile for Heterogeneous Waste

**WIPP CONTACT HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Inorganic Non-metal Waste**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
IN	927.3	0.0	927.3
RF	212.9	12.9	225.8
<b><u>CH TOTALS:</u></b>	<b>1140.3</b>	<b>12.9</b>	<b>1153.1</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	290.75	290.75	0.00
<b>Organics</b>	Cellulosics	1.10	1.10	0.00
	Rubber	1.10	1.10	0.00
	Plastics	19.82	19.82	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Figure 5-5. WIPP CH-TRU Waste Profile for Inorganic Nonmetal Waste

**WIPP CONTACT HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Lead/Cadmium Metal Waste**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
AE	0.4	0.7	1.1
ET	2.5	0.2	2.7
LA	2209.2	1823.8	4033.0
LL	1.0	28.0	29.0
RF	77.3	47.9	125.1
RL	1.8	55.8	57.6
WV	30.9	0.0	30.9
<b><u>CH TOTALS:</u></b>	<b>2323.1</b>	<b>1956.3</b>	<b>4279.4</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Figure 5-6. WIPP CH-TRU Waste Profile for Lead/Cadmium Waste

**WIPP CONTACT HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Salt Waste**

	<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
	IN	17.6	0.0	17.6
	RF	754.3	0.0	754.3
<b><u>CH TOTALS:</u></b>		<b>771.9</b>	<b>0.0</b>	<b>771.9</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	14.42	12.02	0.48
	Aluminum-based Metals/Alloys			
	Other Metals			
<b>Organics</b>	Other Inorganic Materials	567.30	216.30	48.10
	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Figure 5-7. WIPP CH-TRU Waste Profile for Salt Waste

**WIPP CONTACT HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Soil**

	<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
	IN	38.0	0.0	38.0
	RL	4598.8	3181.4	7780.2
<b><u>CH TOTALS:</u></b>		<b>4636.8</b>	<b>3181.4</b>	<b>7818.2</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	3072.12	584.13	0.00
<b>Organics</b>	Cellulosics	12.02	12.02	0.00
	Rubber			
	Plastics	12.02	12.02	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil	144.23	64.90	0.00
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Figure 5-8. WIPP CH-TRU Waste Profile for Soil

**WIPP CONTACT HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Solidified Inorganic Waste**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
AE	21.1	144.4	165.5
AL	0.0	0.3	0.3
IN	6992.2	0.0	6992.2
LA	6274.2	10108.9	16383.1
LL	112.0	851.5	963.5
MD	86.8	27.9	114.7
OR	139.2	37.3	176.5
PA	18.8	0.0	18.8
RF	3232.6	1177.9	4410.5
RL	1989.0	3014.4	5003.4
SR	0.0	0.0	0.0
WV	19.3	0.1	19.4
<b><u>CH TOTALS:</u></b>	<b>18885.3</b>	<b>15362.6</b>	<b>34247.9</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix	2012.02	625.00	164.90
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Figure 5-9. WIPP CH-TRU Waste Profile for Solidified Inorganic Waste

**WIPP CONTACT HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Solidified Organic Waste**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
AE	0.0	0.1	0.2
IN	1017.8	0.0	1017.8
LL	0.8	21.0	21.8
RF	124.1	9.5	133.6
RL	0.4	22.1	22.5
SR	201.5	124.4	325.9
<b>CH TOTALS:</b>	<b>1344.6</b>	<b>177.1</b>	<b>1521.7</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	1134.62	923.08	350.96
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Figure 5-10. WIPP CH-TRU Waste Profile for Solidified Organic Waste

**WIPP CONTACT HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Unspecified Metal Waste**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
AE	4.4	35.7	40.1
IN	10677.1	0.0	10677.1
LA	15.1	0.0	15.1
RF	367.7	312.2	679.9
<b><u>CH TOTALS:</u></b>	<b>11064.3</b>	<b>347.9</b>	<b>11412.2</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	317.31	83.65	0.00
	Aluminum-based Metals/Alloys			
	Other Metals	1586.54	195.19	0.00
	Other Inorganic Materials	19.23	19.23	0.00
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Figure 5-11. WIPP CH-TRU Waste Profile for Unspecified Metal Waste



**WIPP REMOTE HANDLED WASTE PROFILES**

30-Jun-94

**WASTE MATRIX CODE GROUP Filter Waste**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
AW	7.1	0.4	7.5
IN	20.4	204.0	224.4
<b><u>RH TOTALS:</u></b>	<b>27.5</b>	<b>204.4</b>	<b>231.9</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
<b>Organics</b>	Other Inorganic Materials	429.82	429.82	0.00
	Cellulosics			
	Rubber			
<b>Solidified Materials</b>	Plastics	8.77	8.77	0.00
	Inorganic Matrix			
<b>Soils</b>	Organic Matrix			
	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

Figure 5-12. WIPP RH-TRU Waste Profile for Filter Waste

Information Only

**WIPP REMOTE HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Heterogeneous Waste**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
AW	0.0	0.2	0.2
IN	12.8	0.0	12.8
KA	11.2	25.2	36.4
LA	78.4	930.0	1008.4
OR	497.9	238.3	736.2
RL	201.0	2454.8	2655.8
<b><u>RH TOTALS:</u></b>	<b>801.3</b>	<b>3648.5</b>	<b>4449.8</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	256.10	256.10	0.00
	Aluminum-based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Inorganic Materials	29.28	29.28	0.00
<b>Organics</b>	Cellulosics	45.27	7.43	0.00
	Rubber			
	Plastics	67.57	15.09	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

Figure 5-13. WIPP RH-TRU Waste Profile for Heterogeneous Waste

**WIPP REMOTE HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Inorganic Non-metal Waste**

	<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
	RL	0.0	1227.4	1227.4
<b><u>RH TOTALS:</u></b>		<b>0.0</b>	<b>1227.4</b>	<b>1227.4</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	572.12	572.12	0.00
<b>Organics</b>	Cellulosics	24.04	24.04	0.00
	Rubber			
	Plastics	24.04	24.04	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

Figure 5-14. WIPP RH-TRU Waste Profile for inorganic Nonmetal Waste

**WIPP REMOTE HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Lead/Cadmium Metal Waste**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
AW	0.0	0.9	0.9
<b><u>RH TOTALS:</u></b>	<b>0.0</b>	<b>0.9</b>	<b>0.9</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	256.10	256.10	0.00
	Aluminum-based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Inorganic Materials	29.28	29.28	0.00
<b>Organics</b>	Cellulosics	45.27	7.43	0.00
	Rubber			
	Plastics	67.57	15.09	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

Figure 5-15. WIPP RH-TRU Waste Profile for Lead/Cadmium Metal Waste

**WIPP REMOTE HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Solidified Inorganic Waste**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
AW	0.0	0.1	0.1
IN	11.6	0.0	11.6
OR	605.0	180.0	785.0
RL	0.0	1227.4	1227.4
<b><u>RH TOTALS:</u></b>	<b>616.6</b>	<b>1407.5</b>	<b>2024.1</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	290.75	290.75	0.00
<b>Organics</b>	Cellulosics	1.10	1.10	0.00
	Rubber	1.10	1.10	0.00
	Plastics	19.82	19.82	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

Figure 5-16. WIPP RH-TRU Waste Profile for Solidified Inorganic Waste

**WIPP REMOTE HANDLED WASTE PROFILES (contd)**

**WASTE MATRIX CODE GROUP Unspecified Metal Waste**

<u>SITE</u>	<u>Stored Volume</u>	<u>Projected Sum</u>	<u>Total (Volumes in m3)</u>
AE	0.0	47.6	47.6
AW	0.2	0.6	0.8
<b>RH TOTALS:</b>	<b>0.2</b>	<b>48.2</b>	<b>48.4</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	256.10	256.10	0.00
	Aluminum-based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Inorganic Materials	29.28	29.28	0.00
<b>Organics</b>	Cellulosics	45.27	7.43	0.00
	Rubber			
	Plastics	67.57	15.09	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

Figure 5-17. WIPP RH-TRU Waste Profile for Unspecified Metal Waste

## CHAPTER 6

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**Information Only**

## 6. WASTE MATERIAL PARAMETERS

### 6.1 INTRODUCTION

Some waste materials that occur in TRU waste may degrade over the 10,000-year period for performance modeling (EPA, 1993a). Some of these waste materials may produce gas by either chemical, microbial, or radiolytic processes (WIPP PA, 1993). These types of processes need to be evaluated as part of the WIPP SP and PA modeling effort to analyze their impact on repository behavior.

### 6.2 PARAMETER DESCRIPTION

This chapter identifies and defines the waste material parameters to be evaluated in performance assessment calculations. The same methodology used for identifying waste stream profiles and combining them into site-specific and WIPP waste profiles is used to develop a disposal inventory for WIPP by waste material parameters (see Figures 2-1 and 4-1). Waste material parameter information is provided for each waste stream profile (Figure 1-2). This waste material parameter information is used to estimate the anticipated WIPP inventory, which is then scaled to obtain the repository design limit (disposal inventory). This inventory is presented as a weighted average with a maximum and minimum expected weight/volume for each waste material parameter.

A discussion of the methodology for assignment of waste parameter information from the NID to WTWBIR waste streams is presented in Section 2.3.4 and Appendix J. The 10 waste material parameters and packaging materials that are direct inputs into the SP and PA models are:

#### Inorganics

- Iron-based metals/alloys – This designation is meant to include iron and steel alloys in the waste and does not include the waste container materials.
- Aluminum-based metals/alloys – Aluminum or aluminum-based alloys in the waste materials.
- Other Metals – All other metals found in the waste materials (e.g., copper, lead, zirconium, tantalum, etc.). The lead portion of lead rubber gloves/aprons are also included in this category.
- Other Inorganic Materials – Include inorganic nonmetal waste materials such as concrete, glass, firebrick, ceramics, sand, and inorganic sorbents.

#### Organics

- Cellulosics – Includes those materials, generally derived from high polymer plant carbohydrates. Examples are paper, cardboard, kimwipes, wood, cellophane, cloth, etc.
- Rubber – Includes natural or manmade elastic latex materials. Examples are Hypalon, Neoprene, surgeons' gloves, leaded-rubber gloves (rubber part only), etc.
- Plastics – Includes generally manmade materials, often derived from petroleum feedstock. Examples are polyethylene, polyvinylchloride, Lucite, Teflon, etc.



### Solidified Materials

- Inorganic Matrix – This includes any homogenous materials consisting of sludge or aqueous-based liquids that are solidified with cement, Envirostone, or other solidification agents. Examples are wastewater treatment sludge, cemented aqueous liquids, and inorganic particulates, etc.
- Organic Matrix – This includes cemented organic resins, solidified organic liquids, and sludges.

### Soils

- Generally consists of naturally occurring soils that have been contaminated with inorganic waste materials.

### Packaging Materials

- Steel – For this revision of the WTWBIR all CH-TRU waste is **assumed** to be packaged in 55-gallon drums and RH-TRU waste is **assumed** to be packaged in the RH-TRU shipping container for disposal in WIPP. As additional data on other packaging configurations is specified by the TRU waste generator/storage sites, this information will be added to the WTWBIR.
- Plastics – For this revision of the WTWBIR, all CH-TRU waste is assumed to be packaged in ~80 mil high-density polyethylene liner with several layers of plastic bags inside.
- Lead – The RH-TRU canister contains lead as well as steel.

## 6.3 METHODOLOGY

If an MWIR waste stream is a direct match with a waste stream in the NID (i.e., has the same IDC), then that waste material parameter information is used in the WTWBIR. In cases where a direct match does not occur, the waste stream description and WMCs are used in conjunction with expert judgement and general process knowledge to assign waste parameter information from a particular NID waste stream to the particular MWIR waste stream (see Appendix J for additional information). In some cases, two or more NID waste streams could be combined on a weighted basis to provide the correct mix of waste materials for the MWIR waste stream.

The NID information provides weights for materials in an average drum and sometimes provides minimum and maximum weights for the materials. These data were used to calculate densities of particular materials for each IDC. These weights for each material parameter represent the waste profile for each IDC and, hence, for each MWIR waste stream.

Waste material parameters from the NID were rolled up into more general categories. The best way to describe this is with a **hypothetical example** as shown in Table 6-1.

**TABLE 6-1. NID INFORMATION**

Waste Material Parameter	Minimum (wt%)	Average (wt%)	Maximum (wt%)
Paper	10	30	80
Kimwipes	5	15	40
Cloth	0	5	10
Cellulosics (summed)	15	50	
Drum Weights (kg) (waste only)	50	95	150

The average weight percent does not add to 100 percent because other parameters such as metals make up the rest of an average drum. As shown in the fourth line, the data would roll up into the WTWBIR database as cellulosic materials. The result in the WTWBIR would be as follows:

Weight per drum (Kg)			
Parameter	Min	Avg	Max
Cellulose	7.5	47.5	150

The minimum is the sum of the minimum weight percents in the NID multiplied by the minimum weight of waste (i.e., 15 percent x 50 kg = 7.5 kg) in the drum. The average is the sum of the average weight percents multiplied by the average weight of waste (i.e., 50 percent x 95 kg = 47.5 kg) in the drum. The maximum is the sum of the maximum weight percents multiplied by the maximum weight of waste (i.e., 100 percent x 150 kg = 150 kg) in the drum. In this case the maximum weight percents add to more than 100 percent which is physically impossible; therefore, 100 percent is used for the maximum weight percent. When tables and reports are computed for the WTWBIR, the weights per drum are converted to weight per cubic meter based on 0.208 cubic meters per 55-gallon drum.

The rollups of these material parameters by WMCGs or by site use the volumes from the MWIR data in the WTWBIR database. The roll ups by WMCGs or by site require combining data for several MWIR waste streams. The averages for the material parameters are calculated from the NID-derived average densities modified by the MWIR volume fractions and summed as follows:

$$\text{Average Density of rollup group} = \text{Average Density}_1 \times \frac{(\text{Volume MWIR Stream}_1)}{(\text{Total Volume of Group})} + \dots$$

The minimum density is chosen as the smallest minimum density of a particular waste material parameter in the MWIR waste streams in a particular site-specific rollup. The maximum density is chosen in a similar manner, except that the largest maximum density was chosen.

In many cases, the NID does not have data for minimum and maximum percentages, even though average percentages are provided. In these cases, for rollup purposes only, the minimum is assumed to be zero and the maximum is assumed to be equal to the average. This ensures that the calculated and rolled up maximum densities are greater than the average densities. However, the maximum density may not be a true maximum but the maximum average density (see Appendix L for further WTWBIR Database information).

## **6.4 QUALITY ASSURANCE**

**WTWBIR Team** – The data entry, manipulations, and reporting was conducted in conformance to a Quality Assurance Plan (CTS-WTAC-0001). The basic concept of the plan was to:

- Maintain record copies of the database at different points in the development.
- Maintain an auditable record of additions and changes to the database.
- Document and verify the correct use of the database to produce the reports and tables used in the WTWBIR.

This was accomplished by documenting and verifying the changes, additions, corrections, and report and table generation through the use of formal change forms signed and dated by the implementor and checker. The implementor is the individual who initially makes the changes or develops the report or table and the checker is a another individual who checks and verifies that the initial work was correct. If the initial implementation was not correct, the checker confers with the implementor, changes are agreed upon, and the checker and implementor both check that the changes are properly implemented.

The change form is also used by anyone on the WTWBIR team to request a change or addition to the database. In this case the form also includes the requestor's name and the date requested. The requestor can also be the checker or implementor – but not both.

The database manager is responsible for maintaining the record copies of the database, tracking and ensuring proper use of change forms, and ensuring that the technical lead for the WTWBIR team is cognizant of changes being made to the data.

## **6.5 WIPP WASTE MATERIAL PARAMETER ROLLUPS**

The waste material parameters that are inputs into the SP process and PA models are presented in Table 6-2 for CH-TRU waste and Table 6-3 for RH-TRU waste. These tables represent the WIP disposal inventory of waste material parameters. These waste material parameters are the final rollups of the WIPP waste profiles in Tables 5-1 through 5-17.

**TABLE 6-2. WIPP CH-TRU WASTE MATERIAL PARAMETER DISPOSAL INVENTORY**

Radiological Desig: CH		(Kg/m <sup>3</sup> )		
		Maximum	Average	Minimum
	<b>Materials</b>			
<b>Inorganics:</b>	<b>Iron Based</b>	1.7E+03	4.0E+01	0.0E+00
	<b>Aluminum Based</b>	7.4E+01	3.0E+00	0.0E+00
	<b>Other Metals</b>	1.6E+03	1.6E+01	0.0E+00
	<b>Other Inorganics</b>	3.1E+03	5.2E+01	0.0E+00
<b>Organics:</b>	<b>Cellulose</b>	2.0E+03	2.0E+02	0.0E+00
	<b>Rubber</b>	4.6E+02	2.0E+01	0.0E+00
	<b>Plastics</b>	2.9E+03	6.5E+01	0.0E+00
<b>Solidified Materials:</b>	<b>Inorganic</b>	2.0E+03	1.9E+01	0.0E+00
	<b>Organic</b>	2.0E+03	1.2E+01	0.0E+00
<b>Soils</b>		6.7E+02	5.3E+00	0.0E+00
<b>Total Volume:</b>	1.3E+05			
<b>Container Materials:</b>				
	<b>Steel</b>		1.4E+02	
	<b>Plastic Liner</b>		3.9E+01	

**TABLE 6-3. WIPP RH-TRU WASTE MATERIAL PARAMETER DISPOSAL INVENTORY**

Radiological Desig: RH		(Kg/m <sup>3</sup> )		
		Maximum	Average	Minimum
<b>Inorganics:</b>	<b>Materials</b>			
	Iron Based	1.7E+03	7.1E+01	0.0E+00
	Aluminum Based	2.8E+01	3.8E+00	0.0E+00
	Other Metals	9.1E+02	5.0E+00	0.0E+00
<b>Organics:</b>	Other Inorganics	5.7E+02	1.3E+02	0.0E+00
	Cellulose	4.5E+02	3.4E+01	0.0E+00
	Rubber	1.8E+01	2.9E+00	0.0E+00
	Plastics	1.5E+02	3.2E+01	0.0E+00
<b>Solidified Materials:</b>	Inorganic	2.0E+03	7.0E+01	1.6E+02
	Organic	3.0E+00	5.3E-03	0.0E+00
<b>Soils</b>				
<b>Total Volume:</b>		2.6E+03		
<b>Canister, Plug Materials:</b>				
<b>Steel</b>			2.6E+03	
<b>Lead</b>			4.6E+02	

## CHAPTER 7

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## 7. REFERENCES

DOE – See U.S. Department of Energy.

EPA – See U.S. Environmental Protection Agency.

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**APPENDIX A**

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## APPENDIX A GLOSSARY

**40 CFR Part 191, Protection of Environment. EPA: Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and TRU Radioactive Wastes** – The EPA's environmental standards for the storage (Subpart A) and disposal (Subpart B) of spent nuclear fuel, and high-level and TRU radioactive wastes. This is the primary post-closure standard that applies to WIPP. It limits annual radiation doses to the public from waste management storage and disposal facilities.

**40 CFR Part 268, Protection of Environment. EPA: Land Disposal Restrictions** – Restricts the land disposal of all hazardous wastes and specifies strict treatment standards that must be met before these wastes can be land-disposed.

**Americium (Am)** – A TRU radionuclide having an atomic number of 95, containing 95 electrons and 95 protons. Am-241 (half-life 432.7 y) results from the decay of Pu-241 (half-life 14.4 y). Waste initially rich in Pu-241 will therefore "grow" in Am-241 for several decades as the Pu decays. Am-241 exists in finite amounts in TRU waste at INEL, LANL, LLNL, NTS, ORNL, RFP, and SRS.

**Anticipated Inventory** – The sum of the stored and projected inventories, as defined in this document.

**Buried Waste** – TRU waste buried in shallow trenches prior to the 1970 Atomic Energy Commission policy that required TRU waste to be retrievably stored.

**Californium (Cf)** – A TRU element having an atomic number 98 (the number of protons in the nucleus). An alpha emitter (half-life 2.64 y), Cf-252 also spontaneously fissions, thus making it desirable as a neutron source. Cf-252 is created by neutron bombardment of Cm-244 targets. OR is the only production agency for Cf. As a result, the OR inventory is the only TRU waste inventory showing finite quantities of this element.

**Code of Federal Regulations (CFR)** – (1) A codification of the general and permanent rules published in the **Federal Register** by the department and agencies of the federal government. The CFR is divided into 50 titles that represent broad areas subject to federal regulation. It is issued quarterly and revised annually. (2) All federal regulations in force are published annually in codified form in the CFR.

**Contact-Handled (CH) TRU Waste** – Packaged TRU wastes with an external surface dose rate of 200 mrem or less per hour.

**Curie** – A quantitative measure of radioactivity equal to  $3.7 \times 10^{10}$  disintegrations per second.

**Curium (Cm)** – A TRU element having an atomic number of 96 (the number of protons in the nucleus). An alpha emitter (half-life 18.1 y), Cm-244 is used for neutron bombardment of targets for the production of Cf-252 at ORNL. In spite of its half-life being less than 20 years, OR considers and handles Cm-244 as a TRU nuclide. Some TRU waste at both OR and SR contains Cm-244.

**Decontamination and Decommissioning (D&D)** – The process through which DOE facilities which are no longer operational are cleared of contamination and removed from service. In

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particular, a reference to D&D waste is a reference to the waste materials that are generated during D&D activities.

**Defense Waste** – (1) Radioactive waste from any activity performed in whole or in part in support of DOE atomic energy defense activities; excludes waste under purview of the Nuclear Regulatory Commission or generated by the commercial nuclear power industry. (2) Nuclear waste derived mostly from the manufacture of nuclear weapons, weapons-related research programs, the operation of naval reactors, and the decontamination of production facilities.

**Department of Energy Site** – A DOE-owned or -controlled tract used for DOE operations. Either a tract owned by DOE or a tract leased or otherwise made available to the federal government under terms that afford to DOE rights of access and control substantially equal to those that DOE would possess if it were the holder of the fee (or pertinent interest therein) as agent of and on behalf of the government. One or more DOE operations/program activities are carried out within the boundaries of the described tract.

**Design Capacity** – The planned waste capacity of the Waste Isolation Pilot Plant.

**Disposal** – Emplacement of waste in a manner that assures isolation from the biosphere for the foreseeable future with no intent of retrieval and that requires deliberate action to regain access to the waste. For example, disposal of wastes in a mined geologic repository occurs when all of the shafts to the repository area are backfilled and sealed.

**Disposal Inventory** – The total inventory defined for WIPP emplacement (after scaling) to be used for SP and PA calculations.

**Environmental Restoration (ER)** – Those activities associated with the remediation of sites contaminated with hazardous and/or radioactive materials. In particular, a reference to remediation activities conducted under the auspices of the DOE Office of Environmental Restoration and Waste Management, Office of Environmental Restoration, EM-40.

**Federal Facility Compliance Act (FFCA)** – Public law 102-386, 1992.

**Gas Production** – Three gas generation processes are expected to be a factor in the degradation of TRU wastes in the WIPP repository. The generation of gaseous species is expected to occur through chemical (i.e., corrosion), microbial, and radiolytic processes.

**Generator/Storage Sites** – See Waste Generator/Storage Sites.

**Hazardous Waste** – Those wastes that are designated hazardous by EPA (or state) regulations through the RCRA.

**Integrated Data Base (IDB)** – The latest version of the IDB, the *Integrated Data Base for 1993: U.S. Spent Fuel and Radioactive Waste Inventories, Projections, and Characteristics* (DOE, 1994b)

**Mixed TRU Waste** – TRU waste that contains both radioactive and hazardous components as defined by the Atomic Energy Act and the RCRA as codified in 40 CFR Parts 263, 265, 268, and 270 (EPA, 1980a; 1980b; 1986; and 1983).

**Mixed Waste Inventory Report (MWIR)** – The latest release of information from the MWIR database that supports requirements under the FFCA of 1992 (Public Law 102-386). The latest

version of the MWIR documentation/files is *Distribute of Phase II Mixed Waste Inventory Report Data*, dated May 17, 1994 (DOE, 1994a). This information replaces the Phase I MWIR release (DOE, 1994c).

**Newly Generated Wastes** – See Projected Inventory.

**No-Migration Variance Petition (NMVP)** – Section 3004 of RCRA allows EPA to grant a variance from the land disposal restrictions when a determination can be made that, to a reasonable degree of certainty, there will be no migration of hazardous constituents from the disposal unit for as long as the waste remains hazardous. Specific requirements for making this demonstration are found in 40 CFR 268.6, and EPA has published a draft guidance document to assist petitioners in preparing a variance request.

**Non-Mixed TRU Waste** – Transuranic waste that does not contain hazardous constituents or exhibit hazardous characteristics, as identified in 40 CFR 261, Subparts C and D.

**Nonradionuclide Inventory Database (NID)** – A database of the nonradionuclide constituents in the TRU inventory, originally developed by IT during 1988/1989 in support of SNL/NM PA efforts. A summary of the database was transmitted to SNL/NM in a letter report dated May 1989 (WIPP PA, 1991). A copy of the NID waste stream information used in the WTWBIR is provided in Appendix D.

**Performance Assessment (PA)** – (1) A systematic analysis of the potential risks posed by waste management systems to the public and environment and a comparison of those risks to established performance objectives. (2) An analysis that (a) identifies the processes and events that might affect the disposal system, (b) examines the effects of these processes and events on the performance of the disposal system, and (c) estimates the cumulative releases of radionuclides, considering the associated uncertainties, caused by all significant processes and events. These estimates shall be incorporated into an overall probability distribution of cumulative release to the extent practicable. (3) A term used to denote all activities (qualitative and quantitative) carried out to (a) determine the long-term ability of a site/facility to effectively isolate the waste and ensure the long-term health and safety of the public and (b) provide the basis for demonstrating regulatory compliance.

**Plutonium (Pu)** – A radionuclide having an atomic number of 94, the first TRU element. Pu isotopes exist in some TRU waste at all the major DOE storage facilities. The significant isotopes that may exist in measurable quantities at these facilities are Pu-238 through Pu-242. Each isotope is an alpha emitter; the respective half-lives in years are: 238=87.7, 239=24,000, 240=6,563, 241=14.4, 242=376,000. Because of its high activity, Pu-238 can contribute significantly to the thermal loading on some TRU waste. Pu-241 decays, primarily by beta emission, to Am-241.

**Process Knowledge** – The determination of waste container contents through the study of existing records on the production history of the waste.

**Projected Inventory** – That part of the inventory that has not been generated but is estimated to be generated at some time in the future by the TRU waste generator/storage sites. The estimated timeframe may vary, but is usually between 20 and 30 years. "Newly generated waste" also is sometimes used as a synonym for the projected inventory.

**Radioactive** – Substances that emit radiation either naturally or as a result of scientific manipulation.

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**Radionuclide** – (1) A species of atom having an unstable nucleus, that is subject to spontaneous decay or disintegration and usually accompanied by the emission of ionizing radiation. (2) Any nuclide that emits radiation. A nuclide is a species of atom characterized by the constitution of its nucleus and hence by the number of protons, the number of neutron, and the energy content.

**Remote-Handled (RH) TRU Waste** – Packaged TRU wastes with an external surface dose rate exceeding 200 mrem per hour.

**Repository** – Designated location for disposal of transuranic wastes; the Waste Isolation Pilot Plant.

**Resource Conservation and Recovery Act (RCRA)** – (1) Establishes a system for controlling hazardous waste from generation to disposal. (2) A Federal law passed in 1976, and amended under the HSWA of 1984, that established a structure to track and regulate hazardous wastes from the time of generation to disposal. The law requires safe and secure procedures to be used in treating, handling, transporting, storing, and disposing of hazardous substances. RCRA is designed to prevent new uncontrolled hazardous waste sites. The law also regulates the disposal of solid waste that may not be considered hazardous. (3) Specifically, Subtitle D of RCRA governs the management of solid waste. (Note: 40 CFR Parts 260-281 are the regulations for complying with RCRA with respect to hazardous waste and hazardous waste treatment, storage, and disposal facilities.)

**Retrievable Storage** – Designated storage location for transuranic wastes that is designed, operated, and maintained in such a manner that the wastes remain accessible for subsequent retrievable operations.

**Scaling** – The process for adjusting the anticipated inventory to the design limit (disposal inventory) of the WIPP repository.

**Site-Specific Waste Profile** – Represents a WMCG at a particular DOE TRU waste generator/storage site. That is, one or more waste stream profiles, at a particular DOE TRU waste site, that have been placed in the same WMCG are summarized in the site-specific waste profile.

**Stakeholders** – Those persons and/or groups of people and organizations who are affected or perceive they are affected by the DOE waste management program. Stakeholders include DOE management, employees, and contractors (internal); and executive, legislative, and regulatory groups, public representatives, the general public, intervenor groups, special interest groups, contractors, suppliers, and universities (external).

**Stored Inventory** – That part of the TRU inventory currently in retrievable storage as of the time of the last data call for inventory information. Retrievably stored waste includes waste stored in buildings or in berms with earthen cover since 1970 and **does not include any waste that was buried prior to 1970.**

**System Prioritization (SP)** – The SP is a process formulated to identify a set of activities (required experiments, modeling, engineering design, and waste acceptance criteria) that will lead to regulatory compliance. The process is formulated such that it also: (1) addresses stakeholder and regulator concerns early and throughout the regulatory process and (2) leads to a fully defensible performance assessment to be used in demonstrating regulatory compliance. Ultimate products and associated customers are:

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- (1) A decision matrix containing the most likely sets of activities that will lead to compliance as a function of time and budget to be delivered to the WIPP program manager,
- (2) A performance assessment built on assumptions and data that are defensible in the eyes of the stakeholders and the regulators to be delivered to the regulatory compliance branch of Carlsbad Area Office/WIPP through the Westinghouse Waste Isolation Division and ultimately to the EPA, and
- (3) A set of regulatory issues and their current status that result from the SP process and are to be included in compliance packages by the Westinghouse Waste Isolation Division.

**Thorium (Th)** – A radionuclide having an atomic number of 90. Although not TRU, Th-232 is an alpha emitter (half-life 14 billion years) and exists in finite amounts in some TRU waste at HA, IN, and OR. [Note: Thorium is naturally occurring and contributes to background radiation at some sites (e.g., IN)]

**Transuranic** – Pertaining to elements that have atomic numbers greater than 92, including neptunium, plutonium, americium, and curium; all are radioactive, are products of artificial nuclear changes, and are members of the actinide group.

**Transuranic (TRU) Waste** – (1) Waste containing alpha-emitting radionuclides with an atomic number greater than 92 and half-lives greater than 20 years, at concentrations of TRU isotopes greater than 100 nanocuries per gram of waste. **This core definition appears in modified form in various relevant documents as follows:** (a) For purposes of management, DOE Order 5820.2A: (i) considers TRU waste, as defined above, "without regard to source or form" (*The proposed revision to the Order [DOE Order 5820.2A Major Issues for Revision, May 6, 1992]* contemplates removing this clause); (ii) allows head of field elements to determine that wastes containing other alpha-emitting radionuclides must be managed as TRU waste; and (iii) adds "at time of assay," implying both that the classification of a waste as TRU waste is to be made based on an assay, and that such classification can be superseded only by another assay. (b) For purposes of setting standards for management and disposal, 40 CFR 191.02(i) adds "except for: (i) high-level wastes; (ii) wastes that the DOE has determined, with the concurrence of the EPA Administrator, do not need the degree of isolation required by this part; or (iii) wastes that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR 61. (2) Waste materials contaminated with U-233 (and its daughter products), with certain isotopes of plutonium, or with other nuclides with atomic numbers greater than 92. In order to be classified as TRU waste, the long-lived alpha activity from subject isotopes must exceed 100 nanocuries per gram of waste material and from the use of plutonium in the fabrication of nuclear weapons. (3) Wastes that are contaminated with radioactive elements heavier than uranium, thus the name trans-(or beyond) uranic.

**TRUCON** – See TRUPACT-II Content Code.

**TRUPACT-II Content Codes (TRUCON)** – The document containing a description of the waste stream, waste form, and package configuration for each waste content code authorized for shipment in TRUPACT-II containers.

**Unknown Waste Stream** – Those waste streams for which there is insufficient process knowledge to assign a specific WMC.

**Uranium (U)** – A naturally radioactive element with the atomic number of 92 (number of protons in the nucleus) and an atomic weight of approximately 238. The two principal naturally occurring isotopes are the fissionable U-235 (0.7 percent of natural uranium) and the fertile U-

238 (99.3 percent of natural uranium). (Note: An alpha emitter [half-life 159,000 y], U-233 also spontaneously fissions; it is present in finite quantities in some TRU waste inventories at INEL and ORNL.)

**Waste Acceptance Criteria (WAC)** – The criteria used to determine if waste packages are acceptable.

**Waste Form** – The physical form of the waste such as sludges, combustibles, metals, etc.

**Waste Generator/Storage Sites** – The 10 largest DOE facilities and several smaller sites throughout the U.S. that produce and store TRU waste.

**Waste Isolation Pilot Plant (WIPP)** – (1) The project authorized under Section 213 of the DOE National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (Public Law 96-164; 93 Stat. 1259, 1265) to demonstrate the safe, and environmentally sound, disposal of radioactive waste materials generated by atomic energy defense activities. (2) A research and development facility, located near Carlsbad, New Mexico, to be used for demonstrating a practical, long-term solution to a complex problem: the safe disposal in deep geologic repositories of TRU waste resulting from DOE activities. (3) The WIPP has two primary objectives. First, the WIPP is investigating the behavior of salt rock and interactions between the salt rock and radioactive wastes in a variety of forms. Second, the WIPP seeks to demonstrate the safe and efficient handling, transportation, and disposal of TRU waste in an actual facility.

**Waste Material Parameter** – A waste material that occurs in TRU waste that is an input parameter into one or more current SP or PA models, an SP or PA model under development, a potential future model, or is required to adequately describe the waste form.

**Waste Matrix Code (WMC)** – A DOE-developed coding system for organizing waste streams by their physical and chemical properties. A WMC is assigned to each waste stream by the DOE TRU waste generator/storage site. The WMC for each waste stream can be found in the Mixed Waste Inventory Report (DOE, 1994a). This coding system allows waste streams within the DOE TRU waste system that have similar physical and chemical waste form properties to be categorized together. WMCs also have been called "waste treatability codes" in other DOE documents. Appendix C contains the DOE guidance document to help categorize individual waste streams. An example of a WMC for "heterogeneous waste" would be 5400.

**Waste Matrix Code Group (WMCG)** – Consists of a series of WMCs that for SP or PA purposes has similar physical and chemical properties.

**Waste Stream** – Individually, those stored or projected wastes that are defined by a unique identifier in the MWIR.

**Waste Stream Name** – A site-specific, unique descriptive identifier for a TRU waste stream.

**Waste Stream Profile** – A description of a CH-TRU or RH-TRU waste stream destined for shipment to and disposal in WIPP, if authorized under permits and certifications by appropriate regulatory agencies for disposal in the WIPP repository. The waste stream profile is presented in tabular format and is intended to provide a summary of the important information about a particular waste stream.

**Waste Stream Site ID** – A site-specific alphanumeric identification code which provides a unique identifier for an individual TRU waste stream.

**WIPP Waste Profile** – Represents a summary of TRU waste at all DOE TRU waste generator/storage sites that have an identical WMCG.

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**APPENDIX B**

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## APPENDIX B ACRONYMS AND ABBREVIATIONS

AE	ANL-E site identifier
AL	Ames Laboratory
ANL-E	Argonne National Laboratory-East
AW	ANL-W site identifier
ANL-W	Argonne National Laboratory-West
CFR	Code of Federal Regulations
CH	contact handled
D&D	decontamination and decommissioning
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
ER	environmental restoration
ET	ETEC site identifier
ETEC	Energy Technology Engineering Center
FFCA	Federal Facility Compliance Act
GAO	U.S. General Accounting Office
ID	identification
IDB	Integrated Data Base
IDC	Item description code
IN	INEL site identifier
INEL	Idaho National Engineering Laboratory
IMWIR	Interim Mixed Waste Inventory Report (April 1993)
IT	International Technology Corporation
KA	KAPL site identifier
KAPL	Knolls Atomic Power Laboratory - Knolls Site
kg	kilograms
LA	LANL site identifier
LANL	Los Alamos National Laboratory
LB	LBL site identifier
LBL	Lawrence Berkeley Laboratory
LL	LLNL site identifier
LLNL	Lawrence Livermore National Laboratory
MD	Mound Plant
m <sup>3</sup>	cubic meters
mrem	millirem
MU	University of Missouri site identifier
MWIR	Mixed Waste Inventory Report
NID	Nonradionuclide Inventory Database
NMVP	No-Migration Variance Petition
NT	NTS site identifier
NTS	Nevada Test Site
OR	ORNL site identifier
ORNL	Oak Ridge National Laboratory
PA	performance assessment (in text only)
PA	PGDP site identifier (in waste profiles only)
PCB	polychlorinated biphenyls
PGDP	Paducah Gaseous Diffusion Plant
RCRA	Resource Conservation and Recovery Act
RF	RFP site identifier
RFP	Rocky Flats Plant

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**APPENDIX C**

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# **DOE Waste Treatability Groups Guidance**

**September 1993**

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**Final Draft**

**Information Only**

**DOE WASTE TREATABILITY  
GROUPS GUIDANCE**

**TABLE OF CONTENTS**

1. INTRODUCTION .....	1
1.1 BACKGROUND .....	1
1.2 PURPOSE AND SCOPE .....	3
2. METHODOLOGY OVERVIEW .....	5
3. RADIOLOGICAL PARAMETER .....	7
3.1 NATURALLY OCCURRING AND ACCELERATOR PRODUCED RADIOLOGICAL CATEGORIES .....	7
3.2 LOW-LEVEL WASTE RADIOLOGICAL CATEGORIES .....	7
3.3 TRANSURANIC WASTE RADIOLOGICAL CATEGORIES .....	9
3.4 HIGH-LEVEL WASTE RADIOLOGICAL CATEGORIES .....	9
4. MATRIX PARAMETER .....	10
4.1 LIQUIDS .....	10
4.2 SOLIDS .....	13
4.3 SPECIFIC WASTE FORMS .....	24
4.4 UNKNOWN MATRIX .....	27
4.5 FINAL WASTE FORMS .....	27
5. CONTAMINANT PARAMETER .....	29
5.1 FEDERALLY RCRA REGULATED .....	29
5.2 TSCA (PCB) REGULATED PCBS .....	32
5.3 STATE REGULATED HAZARDOUS WASTE .....	32
6. METHODOLOGY APPLICATION .....	33
6.1 SAMPLE APPLICATIONS .....	33
6.2 EXAMPLE TREATABILITY GROUP NAMES .....	34
Appendix A - EPA Codes by Contaminant Category Components .....	A-1

**LIST OF TABLES**

Table A-1. Nonhalogenated Toxicity Characteristic Organics .....	A-2
Table A-2. Nonhalogenated Spent Solvents .....	A-2
Table A-3. Nonhalogenated P & U Listed Organics .....	A-3
Table A-4. Halogenated Toxicity Characteristic Pesticides .....	A-8
Table A-5. Halogenated Toxicity Characteristic Organics .....	A-8
Table A-6. Halogenated Spent Solvents .....	A-9
Table A-7. Halogenated Dioxins .....	A-9
Table A-8. Halogenated P & U Listed Organics .....	A-10

**LIST OF TABLES (CONTINUED)**

Table A-9. Toxicity Characteristic Metals Without Mercury .....	A-13
Table A-10. Plating Waste Metals Without Mercury .....	A-13
Table A-11. P & U Listed Waste - Metals Without Mercury .....	A-14
Table A-12. Mercury EPA Codes .....	A-15
Table A-13. Listed EPA Codes - Cyanides .....	A-15

**LIST OF FIGURES**

Figure 1. Treatability Group Assignment Logic .....	6
Figure 2. Radiological Parameter Categories .....	8
Figure 3. Matrix Parameter Categories .....	11
Figure 4. Containment Parameter Categories .....	30

# 1. INTRODUCTION

This guidance document provides a standard methodology for categorizing waste information that should be implemented at DOE sites. This methodology will assist in the development of the final mixed waste inventory report, the Site Treatment Plans, preparation of the national Site Treatment Plan summary, and analyzing different national treatment options.

The U.S. Department of Energy (DOE) is required by the Resource Conservation and Recovery Act (RCRA), as amended on October 6, 1992 by the Federal Facility Compliance Act, to prepare an inventory report of its mixed wastes and treatment capacities and technologies. The purpose of the inventory report is to identify all mixed waste in the DOE system that is currently stored or will be generated over the next five years, provide an inventory of the existing and planned treatment capacity, and identify DOE's technology development efforts. To aid in identifying the appropriate treatment needs, the waste streams must be grouped according to their technological requirements in a consistent manner. This grouping or characterization will enable the waste streams to be matched to available treatment capacities either at the site or at another DOE facility as well as to identify treatment and technology development needs.

The Federal Facility Compliance Act also requires DOE to develop site treatment plans for each facility at which DOE generates or stores mixed waste. The plans must describe the development of treatment capacities and technologies for treating the site's mixed waste. These plans must be submitted to the State in which the site is located or to the U.S. Environmental Protection Agency (EPA) for review and approval, approval with modification, or disapproval. As discussed in the schedule for the development of the plans, published in the Federal Register on April 6, 1993, DOE intends to prepare two interim versions of the plan (i.e., conceptual plan and draft plan), in addition to the final plan, to facilitate discussions among states and other interested parties. DOE also intends to prepare a summary document (or national "roll up") for each of the conceptual, draft, and final plans to provide a national picture of DOE's technology needs and possible options for treatment of its mixed waste. To properly integrate the site plans into a cohesive national summary and to be able to use the national summary to help identify and evaluate DOE-wide treatment needs against treatment capacities and capabilities, and to develop treatment options, each site plan must be developed using the same technically-based approach for categorizing waste streams and identifying appropriate treatment.

## 1.1 BACKGROUND

The need for a consistently applied, technically-based approach for categorizing waste information has been demonstrated by past national strategic planning efforts involving mixed waste. Since the 1987 byproduct rulemaking, several complex-wide reports and studies have been prepared on mixed waste characteristics and inventories, and associated treatment technology and capacity needs. Most notable of these were the:

- National Report on Prohibited Wastes and Treatment Options, submitted to the Environmental Protection Agency (EPA) in January 1990 as required by the Rocky Flats Plant Federal Facility Compliance Agreement;
- DOE complex-wide Land Disposal Restrictions Case-by-Case Extension Application for Thirds Radioactive Mixed Wastes, submitted to the EPA in November 1991; and
- Interim Mixed Waste Inventory Report, submitted to the EPA and the States in April 1993 as required by the Federal Facility Compliance Act.

Throughout these efforts, characteristic and inventory data on mixed waste streams were collected from the sites resulting in the development of a national data set.

Two significant problems that became apparent throughout these efforts were: 1) mixed waste streams were not always defined on a technical basis that supported assessment of treatment technology and capacity needs, and 2) information and data available on mixed waste streams have improved through time, resulting in apparent inconsistencies between reports. A contributing factor to both these problems has been the lack of a technically-based approach to defining waste streams and the lack of a standardized method to define treatability groups.

Section 102(a)(3) of the Federal Facility Compliance Act waives sovereign immunity for Federal facilities for fines and penalties for violations of federal, state, interstate, and local hazardous and solid waste management requirements. This waiver is delayed for three years for any violations of the land disposal restrictions storage prohibition, RCRA section 3004(j), involving mixed waste at DOE facilities. This waiver is contingent upon the management of the waste being in compliance with all other applicable requirements. The Act further delays the waiver of sovereign immunity beyond the three year period at a facility if DOE is in compliance with an approved plan for developing treatment capacity and technologies for mixed waste generated or stored at the facility and an order requiring compliance with the plan.

DOE published in the Federal Register on April 6, 1993 a schedule for the development of the plans for treating mixed waste for each facility at which DOE generates or stores mixed waste. These plans will describe the use of existing capabilities, and the development of treatment capacities and technologies for treating the site's mixed waste. The Act allows the Plans to provide for centralized, regional or on-site treatment of mixed waste, or any combination thereof. DOE has proposed to prepare two interim versions of the plan, the Conceptual Site Treatment Plan (CSTP) and the Draft Site Treatment Plan (DSTP), to facilitate discussion between the site and the regulatory agency and among states, EPA, and other interested parties on technical and equity issues. The interim plans will also facilitate information exchange among the sites and regulatory agencies and help identify common technical problems and needs. The interim plans will provide information about the technology needs, existing and planned treatment facilities, and treatment options, including potential options for treating off-site wastes. Each site, if possible, will discuss its CSTP framework with the appropriate State or EPA, and will submit to the State or EPA, by October 1993, a CSTP that will provide a preliminary identification of options for treating the site's waste. DOE will summarize all CSTPs by preparing a national roll-up for various cross-cut treatment options. Based on the CSTPs, the national summary, and discussions among states, EPA, DOE and others, each site will submit a DSTP not later than August 1994 to identify the preferred option for treating its mixed waste. Each DOE site will submit the final Site Treatment Plan not later than February 1995 to the appropriate State or EPA for review and approval.

In order to properly integrate the site treatment plans into a cohesive national summary, to be able to use the national summary to help identify and evaluate DOE-wide treatment needs against treatment capacity and capabilities, and to develop treatment options, each Site Treatment Plan must be developed using the same technically-based approach for categorizing waste streams and identifying appropriate treatment. By using the same methodology, DOE sites will be able to share information across the complex on potential treatment technologies/treatment capacities for any specific category of waste. Therefore, this should assist the site in the development of various options with the site treatment plan.

The Act also requires the DOE to prepare an inventory report of its mixed wastes and treatment capacities and technologies. The interim report was submitted to EPA and the States in April 1993 as required by the Act. The inventory report as required by the Act contains:

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- a national inventory of all mixed waste in the DOE system that are currently stored or will be generated over the next five years, including waste stream name, description, EPA waste codes basis for characterization, quantity stored that is subject to the Land Disposal Restrictions (LDRs) storage prohibition, quantity stored that is not subject to the LDRs, expected generation over the next five years, Best Demonstrated Available Technology (BDAT) used for developing the LDR requirements, waste minimization activities, and a statement of whether and how the radionuclide content alters or affects the use of treatments technologies; and
- a national inventory of mixed waste treatment capacities and technologies, including information such as the description, capacities, and locations of all existing and proposed treatment facilities, explanations for not including certain existing facilities in capacity evaluation, information to support decisions on unavailability of treatment technologies for certain mixed wastes, and the planned technology development activities.

The purpose of the inventory report is to identify all mixed waste in the DOE system and to be able to match these waste streams to the appropriate treatment. To accomplish this, the waste streams and their associated treatability groups must be identified consistently at all DOE sites so that the waste streams can be matched to available treatment capacities and to identify treatment needs and technology development needs complex-wide. DOE intends to revise the interim inventory report and to update it on an annual basis. The inventory report will act as the most up-to-date information source for DOE's mixed waste.

When developing the site treatment plans and updating the interim mixed waste inventory report, this guidance provides a technically-based method for categorizing waste streams based on the regulatory and technological requirements from different waste streams/waste packages. While developed primarily for mixed waste, the method may be applied to other DOE waste types, e.g., radioactive waste and hazardous waste.

## 1.2 PURPOSE AND SCOPE

The purpose of the guidance is to provide a technically-based methodology for categorizing DOE waste information in a consistent, and technically valid manner to be used for the development of the Site Treatment Plans and to update the Mixed Waste Inventory Report. The methodology provides a formal approach for categorizing waste based on waste characteristics. This guidance includes:

- A methodology with standard definitions for aligning site-specific wastes into treatability groups that share similar treatment needs;
- A standard structure that will allow comparing waste treatability groups among sites, and combining all site-specific data into one data set for the national summary and the mixed waste inventory report;
- A technically-based approach to identify treatment technology needs, treatment capacity needs, technology development needs, and storage and disposal requirements for DOE mixed waste.

The treatability group assignments will allow comparisons of basic treatment needs to available and planned treatment capacity. The assignment of a treatability group to a waste stream is not intended to provide the detailed level of knowledge necessary to certify waste streams to treatment or disposal facility waste acceptance criteria (WAC), or to provide detailed characterization information required to proceed

beyond conceptual design to specific facilities. Additional characterization of waste streams will be required to accomplish facility design and WAC certification.

## 2. METHODOLOGY OVERVIEW

The methodology for categorizing waste streams into treatability grouping is based on the premise that the key information necessary for identifying treatment methods/or assessing technology needs can be identified from the radiological, physical, and chemical properties of the waste and its contaminants. This methodology uses three characteristic parameters: radiological, bulk physical/chemical matrix, and contaminants.

For the purposes of this guidance, waste streams should be consistent with those identified in the most current Mixed Waste Inventory report. For the Mixed Waste Inventory Report a waste stream is defined as "waste material generated from a single process or activity (e.g., a pipe or series of pipes from a single production process, replacement of a certain component of a production or support process (like a battery), or remediation activity like cleaning out a lagoon), covered by only one treatability group. For wastes stored in transportable containers, a waste stream should comprise at least one container (unless the material in the container is likely to be separated prior to sending it anywhere for processing). A single waste stream in storage may include several containers of waste material, but only if the material is from the same type of source and of essentially the same physical and chemical properties."<sup>1</sup> A single waste stream should be assigned to no more than one unique treatability group consisting of a single radiological and bulk physical/chemical matrix parameter. A single waste stream may have more than one contaminant parameter assigned to it.

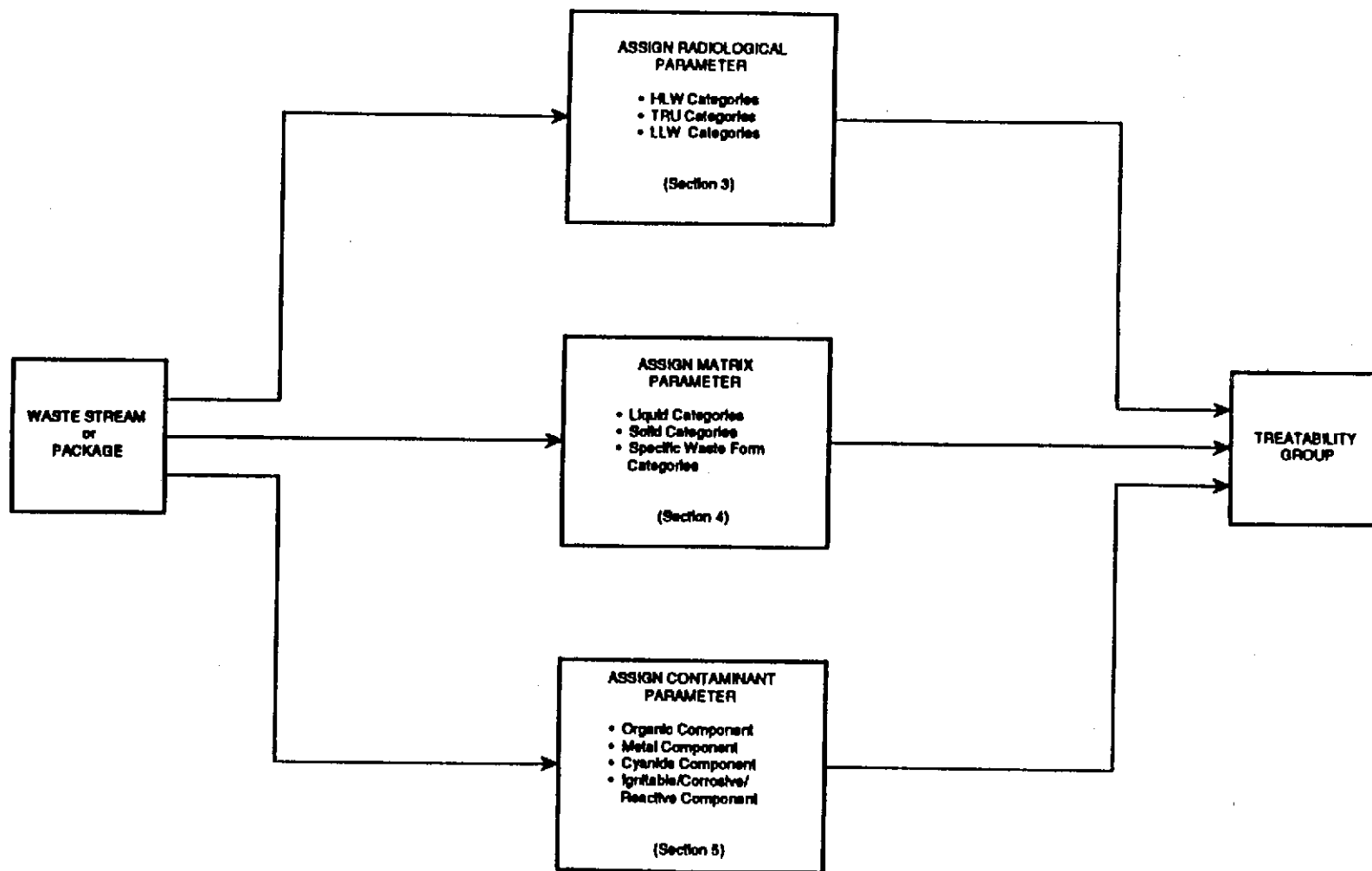
Each of these parameters impacts treatment needs and/or technology determinations. The radiological parameter influences the design of the treatment facility to control radioactive releases and to prevent worker exposure. The matrix parameter identifies the physical/chemical properties of the waste and influences the facility design and technology selection. The contaminant parameter of the waste determines the type of treatment requirements from a regulatory and technical perspective. The contaminant parameter also influences any necessary follow-up or residual treatment and dictates any necessary effluent controls required. Combined, the parameters define a treatability group for the waste. Figure 1 displays the logic flow for identifying the relevant characteristic parameters for each waste type.

Sections 3, 4, and 5 of this report discuss the various categories under each characteristic parameter and provide definitions for these categories. The primary focus of this guidance document is to assign each waste to the lowest level subcategory based on the data available at the site on a given waste stream. Having detailed treatability group data could potentially influence the design of a planned treatment facility, enabling it to manage all wastes within a single (or set of) treatability group(s). In preparation of the national summary of the STPs, lower level subcategories may be rolled-up to the higher level categories for various general cross-cut evaluations. Detailed data will not be lost during the roll-up but will be available for more specific treatment and technology analyses. Section 6 provides guidelines for implementing the methodology and example applications. As more detailed characterization data becomes available the treatability group assignment of a waste stream may change. The most current, accurate information should be used in making the treatability group assignment.

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1. Definition of "waste stream" from the Definitions for Key Mixed Waste Data Elements; Draft – August 26, 1993.

**Figure 1. Treatability Group Assignment Logic**



### 3. RADIOLOGICAL PARAMETER

This section presents the categories and definitions for the radiological parameter. The radiological categories are based on the activity level of the waste and will influence the design of the facility to control radioactive releases and operator exposure. As shown in Figure 2, the primary radiological categories include:

- naturally occurring and accelerator produced radioactive materials,
- low-level waste,
- transuranic waste, and
- high-level waste.

These categories for the radiological parameter are based on definitions established in DOE Order 5820.2A. Following are the more specific categories and definitions within each of these general radiological categories.

#### 3.1 NATURALLY OCCURRING AND ACCELERATOR PRODUCED RADIOLOGICAL CATEGORIES

Naturally occurring and accelerator produced radioactive materials (NARM) are defined by DOE Order 5820.2A as any radioactive material that can be considered naturally occurring and is not source, special nuclear, or byproduct material or that is produced in a charged particle accelerator. DOE Order 5820.2A specifies that NARM be managed as low-level waste or as tailings under the Uranium Mill Tailings Radiation control Act of 1978 (Public Law 95-604). The radiological hazards posed by these materials are similar to those from low-level waste. These materials are not included in the definition of mixed waste.

#### 3.2 LOW-LEVEL WASTE RADIOLOGICAL CATEGORIES

Low-level waste is defined by DOE Order 5820.2A as all radioactive waste that are not classified as high-level waste, TRU waste, spent fuel, or uranium or thorium mill tailings. Mixed low-level waste is further categorized according to beta-gamma activity levels and levels of transuranic alpha contamination. Following are the category definitions.

##### 3.2.1 Contact-Handled LLW

###### **LL/CH Contact-Handled LLW**

This category includes low-level waste that has an exposure rate of 200 mR/hr or less on contact.

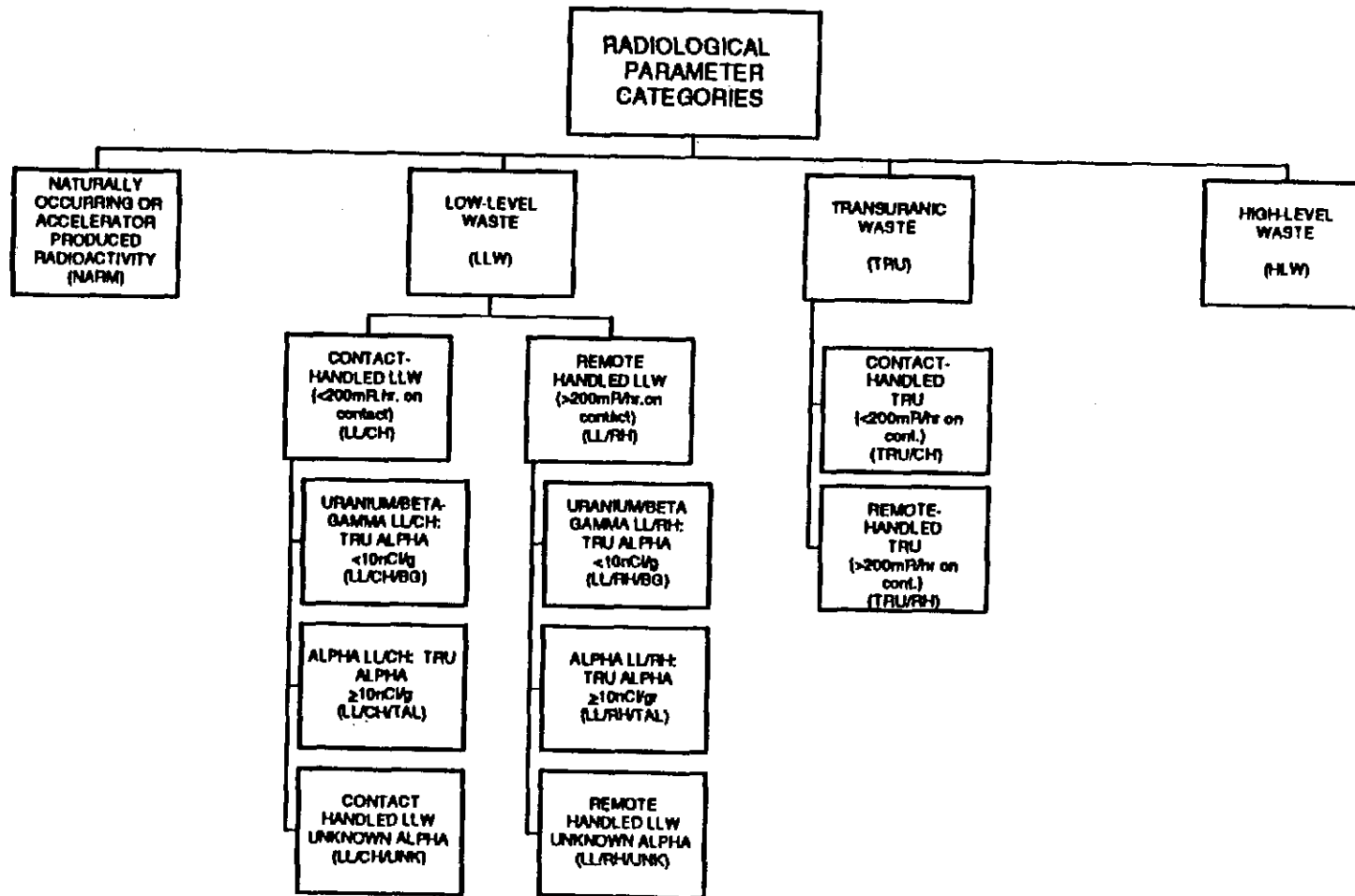
###### **LL/CH/BG Uranium/Beta-Gamma LL/CH**

This category includes contact handled low-level waste that contains transuranic isotopes with a combined transuranic alpha activity of less than 10 nCi/g. Alpha activity from uranium is not included in the limit.

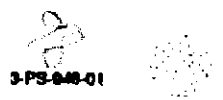
###### **LL/CH/TAL Transuranic Alpha LL/CH**

This category includes contact handled low-level waste that contains transuranic isotopes with a combined alpha activities of greater than or equal to 10 nCi/g. Alpha activity from uranium is not included in this limit.

**Figure 2. Radiological Parameter Categories**



C-11  
8



**LL/CH/UNK Contact Handled LLW Unknown Alpha**

This category includes contact handled low-level waste which has not been sufficiently characterized to determine the transuranic alpha activity.

**3.2.2 Remote-Handled LLW**

**LL/RH Remote-Handled LLW**

This category includes mixed low-level waste that has an exposure rate greater than 200 mR/hr on contact.

**LL/RH/BG Uranium/Beta-Gamma LL/RH**

This category includes remote handled low-level waste that contains transuranic isotopes with a combined transuranic alpha activity of less than 10 nCi/g. Alpha activity from uranium is not included in the limit.

**LL/RH/TAL Transuranic Alpha LL/RH**

This category includes remote handled low-level waste that contains transuranic isotopes with a combined alpha activities of greater than or equal to 10 nCi/g. Alpha activity from uranium is not included in this limit.

**LL/RH/UNK Remote Handled LLW Unknown Alpha**

This category includes remote handled low-level waste which has not been sufficiently characterized to determine the transuranic alpha activity.

**3.3 TRANSURANIC WASTE RADIOLOGICAL CATEGORIES**

Transuranic (TRU) waste, as defined by DOE Order 5820.2A refers to all radioactive waste that contain more than 100 nCi/g of alpha-emitting isotopes with atomic numbers greater than 92 and half-lives greater than 20 years. This definition includes isotopes of neptunium (Np), plutonium (Pu), americium (Am), curium (Cm), and californium (Cf). Transuranic waste is categorized according to beta-gamma activity levels as follows.

**3.3.1 Contact-Handled TRU**

**TRU/CH Contact-Handled TRU**

This category includes TRU waste having an exposure rate of 200 mR/hr or less on contact.

**3.3.2 Remote-Handled TRU**

**TRU/RH Remote-Handled TRU**

This category includes TRU waste having an exposure rate greater than 200 mR/hr on contact.

**3.4 HIGH-LEVEL WASTE RADIOLOGICAL CATEGORIES**

High-level waste (HLW) is defined by DOE Order 5820.2A as "... the highly radioactive waste material that results from the reprocessing of spent nuclear fuel, including the liquid waste produced directly in the reprocessing, and any solid waste derived from the liquid that contains a combination of transuranic waste and fission products in concentrations as to require permanent isolation." There are no definitive radiological subcategories defined in this guidance for HLW. Typically, waste determined to be high-level contains transuranic isotopes and is remote-handled.

## 4. MATRIX PARAMETER

This section presents the categories and definitions for the matrix parameter. The matrix parameter describes the bulk physical/chemical form of the waste. The physical/chemical form of the waste effects both the appropriate regulatory treatment requirements and the applicability of specific treatment technologies. In some cases, the physical/chemical form of the waste may dictate some type of pretreatment or design modification to accommodate special handling of the waste.

The matrix parameter categories and definitions are presented in five subsections of this guidance according to generic physical/chemical waste form classifications. The generic physical/chemical waste form classifications are:

- Liquids
- Solids
- Specific Waste Forms
- Unknown Matrix
- Final Waste Forms

The matrix parameter categories are shown in Figure 3. The following subsections present the categories and definitions for each of the above classifications.

### 4.1 LIQUIDS

These categories address waste streams that are liquid, including pumpable slurries. In general, slurries are considered pumpable with a total suspended/settled solids (TSS) content of up to approximately 35% to 40%. Only liquids and slurries packaged in bulk, free form (e.g. drum, tank) are included in these categories. Liquids and slurries packaged as lab packs are addressed elsewhere (see Section 4.3). Following are the category definitions.

#### 4.1.1 Aqueous Liquids/Slurries

##### 1000 Aqueous Liquids/Slurries

This category includes liquids and slurries containing less than 1% total organic carbon (TOC).

##### 1100 Wastewaters

This category includes aqueous liquids/slurries containing less than 1% TSS.

##### 1110 Acidic Wastewaters

This category includes wastewaters with a  $\text{pH} \leq 2.0$ .

##### 1120 Basic Wastewaters

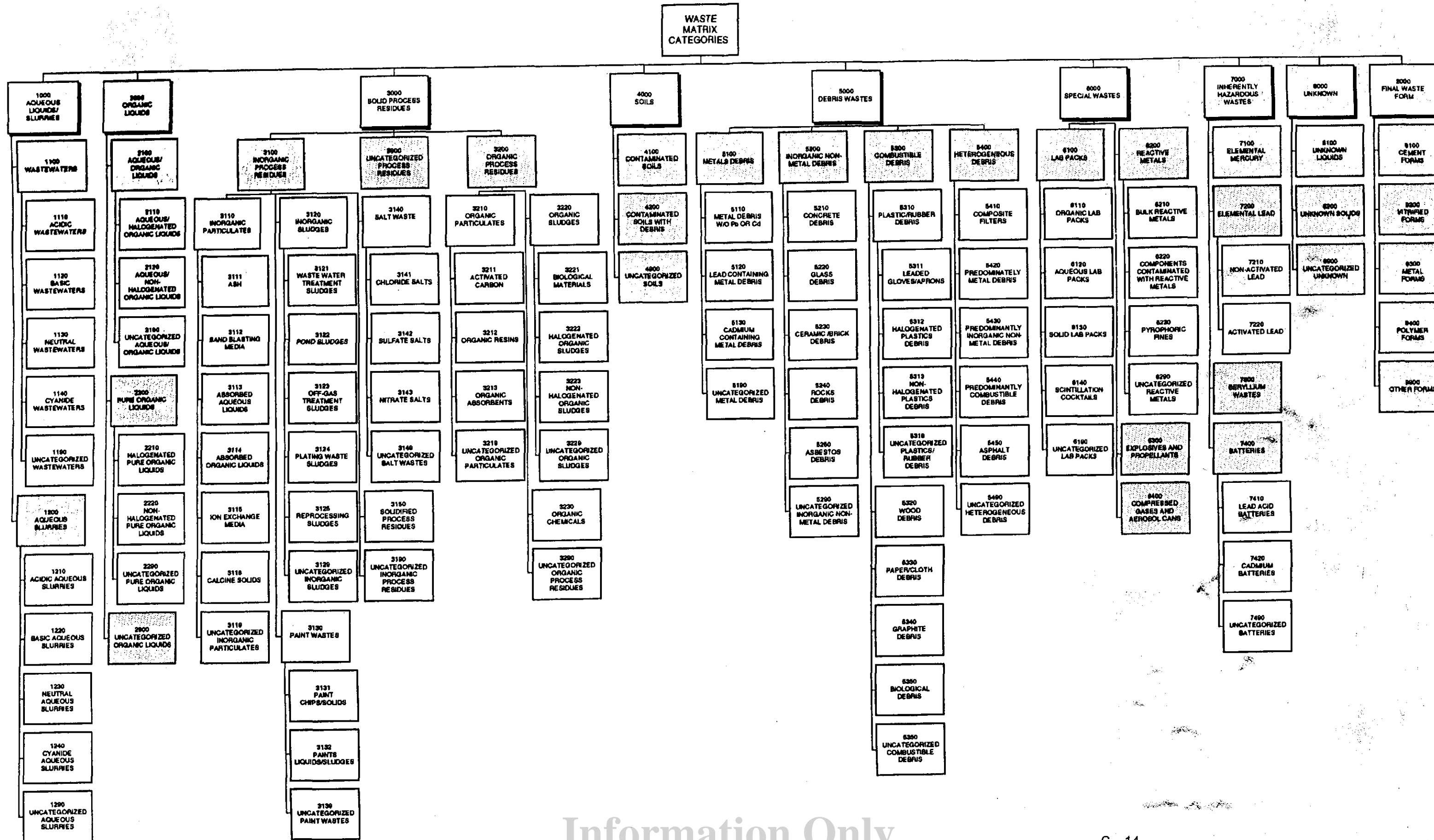
This category includes wastewaters with a  $\text{pH} \geq 12.5$ . Basic wastewaters that contain cyanides at, or above, applicable LDR treatment standard levels are assigned to category 1140.

##### 1130 Neutral Wastewaters

This category includes wastewaters with  $2.0 < \text{pH} < 12.5$ .



Figure 3. Matrix Parameter Categories



**1140 Cyanide Wastewaters**

This category includes basic wastewaters containing cyanides at, or above, applicable LDR treatment standard levels.

**1190 Uncategorized Wastewaters**

This category includes wastewaters that;

- 1) are insufficiently characterized to categorize more definitively into one of categories 1110 through 1140, or
- 2) do not meet the criteria for categorization into one of the 1110 through 1140 categories, or
- 3) are mixtures of two or more of the 1110 through 1140 categories.

**1200 Aqueous Slurries**

This category includes pumpable aqueous liquids/slurries with TSS  $\geq$  1% or with an unknown TSS level.

**1210 Acidic Aqueous Slurries**

This category includes aqueous slurries with a pH  $\leq$  2.0.

**1220 Basic Aqueous Slurries**

This category includes aqueous slurries with a pH  $\geq$  12.5. Basic aqueous slurries that contain cyanides at, or above, applicable LDR treatment standard levels are assigned to category 1240.

**1230 Neutral Aqueous Slurries**

This category includes aqueous slurries with  $2.0 < \text{pH} < 12.5$ .

**1240 Cyanide Aqueous Slurries**

This category includes basic aqueous slurries containing cyanides at, or above, applicable LDR treatment standard levels.

**1290 Uncategorized Aqueous Slurries**

This category includes aqueous slurries that;

- 1) are insufficiently characterized to assign into one of categories 1210 through 1240, or
- 2) do not meet the criteria for assignment into one of the 1210 through 1240 categories, or
- 3) are mixtures of two, or more, of the 1210 through 1240 categories.

**4.1.2 Organic Liquids**

**2000 Organic Liquids**

This category includes liquids and slurries containing  $\geq$  1% TOC.

**2100 Aqueous/Organic Liquids**

This category includes miscible and immiscible mixtures of aqueous and organic liquids. The TOC content of the mixture is at least 1% but less than about 99%.

**2110 Aqueous/Halogenated Organic Liquids**

This category includes aqueous/organic liquids that contain at least 1000 ppm halogenated organic compounds (HOC).

**2120 Aqueous/Nonhalogenated Organic Liquids**

This category includes aqueous/organic liquids that contain less than 1000 ppm HOC.

**2190 Uncategorized Aqueous/Organic Liquids**

This category includes aqueous/organic liquids for which it is not known whether the HOC content is less than, equal to, or greater than 1000 ppm.

**2200 Pure Organic Liquids**

This category includes liquids that are essentially purely organic (e.g. TOC > 99%).

**2210 Halogenated Pure Organic Liquids**

This category includes pure organic liquids that contain at least 1000 ppm HOC.

**2220 NonHalogenated Pure Organic Liquids**

This category includes pure organic liquids that contain less than 1000 ppm HOC.

**2290 Uncategorized Pure Organic Liquids**

This category includes pure organic liquids for which it is not known whether the HOC content is less than, equal to, or greater than 1000 ppm.

**2900 Uncategorized Organic Liquids**

This category includes liquids with TOC  $\geq$  1% for which insufficient information is available to determine if the liquid is essentially purely organic (e.g. TOC > 99%).

## 4.2 SOLIDS

These categories address waste with physically solid matrices, including sludges. As opposed to slurries, sludges are considered nonpumpable. Solids are initially categorized according to the general classifications of process residues, soil, and debris. Figure 3 shows these general classifications and associated categories. Following are the category definitions.

### 4.2.1 Solid Process Residues

**3000 Solid Process Residues**

Solid Process Residues are defined in this guidance as solid materials, excluding soil, that do not meet the EPA criteria for classification as debris. Examples of solid process residues are sludge and particulate type materials. This category includes waste that are at least 50% by volume solid process residues. The balance of the matrix may be debris or soil.

### **3100 Inorganic Process Residues**

This category includes waste that is at least 50% by volume inorganic process residues. These are defined as process residues with sufficient inorganic solids content such that a minimum of approximately 20% by weight of the waste would remain as residue (i.e. ash/solids) following incineration.

#### **3110 Inorganic Particulates**

This category includes waste that is at least 50% by volume inorganic particulates, including residual or absorbed liquids, if present. Typical examples of inorganic particulates are incinerator ash, dust, sand blasting residue, vermiculite, and ion exchange media.

#### **3111 Ash**

This category includes waste that is primarily (e.g.  $\geq 50\%$  by volume) bottom or fly ash resulting from waste incineration.

#### **3112 Sand Blasting Media**

This category includes waste that is primarily (e.g.  $\geq 50\%$  by volume) unused, or spent, surface cleaning or decontamination particulate material. Typical examples of surface cleaning or decontamination particulate materials are coarse sand and glass beads.

#### **3113 Absorbed Aqueous Liquids**

This category includes waste that is primarily (e.g.  $\geq 50\%$  by volume) inorganic particulate absorbent materials, including absorbed aqueous liquids, if present. Typical examples of inorganic particulate absorbent materials are clay, vermiculite, and diatomaceous earth.

#### **3114 Absorbed Organic Liquids**

This category includes waste that is primarily (e.g.  $\geq 50\%$  by volume) inorganic particulate absorbent materials with absorbed organic liquids. Typical examples of inorganic particulate absorbent materials are clay, vermiculite, and diatomaceous earth.

#### **3115 Ion Exchange Media**

This category includes waste that is primarily (e.g.  $\geq 50\%$  by volume) unused, or spent, inorganic ion exchange resins.

#### **3116 Calcined Solids**

This category includes waste that is primarily (e.g.  $\geq 50\%$  by volume) solid materials generated from the calcination of liquids. A specific example is the HLW calcine at the INEL.

#### **3119 Uncategorized Inorganic Particulates**

This category includes waste that is;

- 1) consistent with the definition for inorganic particulates but lack adequate characterization information for assignment into one of the 3111 through 3116 categories, or

- 2) consistent with the definition for inorganic particulates but inconsistent with the definitions for categories 3111 through 3116, or
- 3) a mixture of categories 3111 through 3116 with none contributing at least 50% by volume to the matrix.

**3120 Inorganic Sludges**

This category includes waste that is at least 50% by volume inorganic sludges. The inorganic sludge may be mixed with stabilization agents, such as cement, provided the mixture has not properly cured to form a solidified monolith (see category 3150). The inorganic sludge may also be mixed with inorganic particulate absorbent materials.

**3121 Wastewater Treatment Sludges**

This category includes waste that is at least 50% by volume secondary sludge or filtercake from wastewater treatment processes.

**3122 Pond Sludges**

This category includes waste that is at least 50% by volume inorganic sludge generated from the remediation of surface impoundments, such as evaporation or sedimentation basins.

**3123 Off-Gas Treatment Sludges**

This category includes waste that is at least 50% by volume inorganic sludge generated from wet off-gas treatment systems.

**3124 Plating Waste Sludges**

This category includes waste that is at least 50% by volume inorganic sludge generated from plating operations.

**3125 Reprocessing Sludges**

This category includes waste that is at least 50% by volume inorganic sludge generated from nuclear fuel reprocessing operations.

**3129 Uncategorized Inorganic Sludges**

This category includes waste that is;

- 1) consistent with the definition for inorganic sludges but lack adequate characterization information for assignment into one of the 3121 through 3125 categories, or
- 2) consistent with the definition for inorganic sludges but inconsistent with the definitions for categories 3121 through 3125, or
- 3) a mixture of categories 3121 through 3125 with none contributing at least 50% by volume to the matrix.

**3130 Paint Waste**

This category includes waste that is at least 50% by volume new, used, or removed paint.

**3131 Paint Chips/Solids**

This category includes waste that is at least 50% by volume solid, or unpourable paint. Examples of waste that might be included in this category are dried paint chips or containers filled with dried paint. Painting equipment (e.g. brushes, rollers, etc) are categorized as debris.

**3132 Paint Liquids/Sludge**

This category includes waste that is at least 50% by volume pourable paint. Examples of waste that might be included in this category are opened or unopened cans of paint.

**3139 Uncategorized Paint Waste**

This category includes waste that is;

- 1) consistent with the definition for salt waste but lack adequate characterization information for assignment into one of the 3131 and 3132 categories, or
- 2) consistent with the definition for salt waste but inconsistent with the definitions for categories 3131 and 3132.

**3140 Salt Waste**

This category includes waste that is at least 50% by volume salts, including interstitial liquids, if present.

**3141 Chloride Salts**

This category includes waste that is at least 50% by volume salts and contain more than trace (i.e. > 1000 ppm) levels of chlorides or other halogens.

**3142 Sulfate Salts**

This category includes waste that is at least 50% by volume salts and contain more than trace (i.e. > 1000 ppm) levels of sulfur compounds.

**3143 Nitrate Salts**

This category includes waste that is at least 50% by volume salts. The salts are predominantly nitrates.

**3149 Uncategorized Salt Waste**

This category includes waste that is;

- 1) consistent with the definition for salt waste but lack adequate characterization information for assignment into one of the 3141 through 3143 categories, or
- 2) consistent with the definition for salt waste but inconsistent with the definitions for categories 3141 through 3143, or
- 3) a mixture of categories 3141 through 3143 with none contributing at least 50% by volume to the matrix.

**3150 Solidified Process Residues**

This category includes waste that has been immobilized with cement, or other inorganic stabilization agents, and cured into a solidified form but do not meet disposal criteria.

**3190 Uncategorized Inorganic Process Residues**

This category includes waste that is;

- 1) consistent with the definition for inorganic homogeneous solids but lack adequate characterization information for assignment into one of the 3110 through 3150 categories, or
- 2) consistent with the definition for inorganic homogeneous solids but inconsistent with the definitions for categories 3110 through 3150, or
- 3) a mixture of categories 3110 through 3150 with none contributing at least 50% by volume to the matrix.

**3200 Organic Process Residues**

This category includes waste that is at least 50% by volume organic process residues. These are defined as process residues with a base structure that is primarily organic. The matrix may contain some inorganic solids content such that up to approximately 20% by weight of the waste would remain as residue (i.e. ash/solids) following incineration.

**3210 Organic Particulates**

This category includes waste that is at least 50% by volume organic particulates, including residual or absorbed liquids, if present. Typical examples of organic particulates are resins and activated carbon used in wastewater treatment, or particulate organic absorbent materials.

**3211 Activated Carbon**

This category includes waste that is primarily (e.g.  $\geq 50\%$  by volume) spent or unused activated carbon. Activated carbon is typically used for removal of organic materials during off-gas or wastewater treatment operations.

**3212 Organic Resins**

This category includes waste that is primarily (e.g.  $\geq 50\%$  by volume) spent or unused organic based resins, other than activated carbon, used in wastewater treatment or other applications. An example of waste that might be included in this category is organic ion exchange resins.

**3213 Organic Absorbents**

This category includes waste that is primarily (e.g.  $\geq 50\%$  by volume) organic particulate absorbent materials, including any absorbed aqueous or organic liquids. Examples of waste that might be included in this category are sawdust or ground corn cobs with absorbed aqueous or organic liquids.

**3219 Uncategorized Organic Particulates**

This category includes waste that is;

- 1) consistent with the definition for organic particulates but lack adequate characterization information for assignment into one of the 3211 through 3213 categories, or
- 2) consistent with the definition for organic particulates but inconsistent with the definitions for categories 3211 through 3213, or
- 3) mixtures of categories 3211 through 3213 with none contributing at least 50% by volume to the matrix.

**3220 Organic Sludges**

This category includes waste that is at least 50% by volume organic sludges. Examples of waste streams included in this category are biological sludges and heavy, unpourable organic materials, such as tars or greases.

**3221 Biological Materials**

This category includes waste that is at least 50% by volume biological materials generated in treating wastewater from animals or people, or other biological materials that can not be classified as debris.

**3222 Halogenated Organic Sludges**

This category includes waste that is at least 50% by volume organic sludges which contain at least 1000 ppm HOC.

**3223 Nonhalogenated Organic Sludges**

This category includes waste that is at least 50% by volume organic sludges which contain less than 1000 ppm HOC.

**3229 Uncategorized Organic Sludges**

This category includes waste that is;

- 1) consistent with the definition for organic sludges but lack adequate characterization information for assignment into one of the 3221 through 3223 categories, or
- 2) consistent with the definition for organic sludges but inconsistent with the definitions for categories 3221 through 3223, or
- 3) mixtures of categories 3221 through 3223 with none contributing at least 50% by volume to the matrix.

**3230 Organic Chemicals**

This category includes waste that is at least 50% by volume solid, unused organic chemicals packaged in bulk form that are either being excessed or have expired. This category does not include solid organic chemicals packaged as lab packs (see Section 4.3).

**3290 Uncategorized Organic Process Residues**

This category includes waste that is;



- 1) consistent with the definition for organic homogeneous solids but lack adequate characterization information for assignment into one of the 3210 through 3230 categories, or
- 2) consistent with the definition for organic homogeneous solids but inconsistent with the definitions for categories 3210 through 3230, or
- 3) mixtures of categories 3210 through 3230 with none contributing at least 50% by volume to the matrix.

**3900 Uncategorized Process Residues**

This category includes waste that is;

- 1) consistent with the definition for homogeneous solids but lack adequate characterization information for assignment into one of the 3100 or 3200 categories, or
- 2) consistent with the definition for homogeneous solids but inconsistent with the definitions for categories 3100 or 3200.

**4.2.2 Soils**

**4000 Soils**

This category includes waste streams that are at least 50% by volume soil, including contamination from spills, etc. Soils are further categorized based on the amount of debris included in the matrix.

**4100 Contaminated Soils**

This category includes waste that is greater than approximately 95% by volume soil and rock, including contamination from spills, etc.

**4200 Contaminated Soils/Debris**

This category includes waste that is at least 50% by volume soil and 5% by volume other debris, not including rock. Rock materials that meet the criteria for debris should be included in the contaminated soil category (4100). This category includes contaminated soil and rock from spills etc., with the balance of the matrix being debris.

**4900 Uncategorized Soils**

This category includes waste that are;

- 1) consistent with the definition for soils but lack adequate characterization information for assignment into one of the 4100 or 4200 categories, or
- 2) consistent with the definition for soils but inconsistent with the definitions for categories 4100 or 4200.

**4.2.3 Debris Waste**

**5000 Debris Waste**

This category includes waste that is at least 50% by volume materials which meet the EPA criteria for classification as debris. These criteria are as follows:

"Debris means solid material exceeding a 60 mm particle size that is intended for disposal and that is: 1) a manufactured object, or 2) plant or animal matter, or 3) natural geologic material. However, the following materials are not debris: 1) any material for which a specific treatment standard is provided in Subpart D, Part 268, 2) process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and 3) intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume. A mixture of debris that has not been treated to the standards provided by §268.45 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection." [40 CFR §268.2(g)]

"Hazardous Debris means debris that contains a hazardous waste listed in Subpart D of Part 261, or that exhibits a characteristic of hazardous waste identified in Subpart C of Part 261." [40 CFR §268.2(h)]

**5100 Metal Debris**

This category includes debris that is approximately 95% by volume, or more, metal. Metal debris is further categorized according to lead and cadmium content.

**5110 Metal Debris without Pb or Cd**

This category includes debris that is approximately 95% by volume, or more, metal and do not contain any bulk, separable or bonded, lead or cadmium as part of the matrix.

**5120 Lead Containing Metal Debris**

This category includes debris that is approximately 95% by volume, or more, metal and contain bulk, separable or bonded, lead as part of the matrix. Examples of waste that might be included in this category are glovebox parts with lead clad in stainless steel or scrap metal that includes some lead bricks. This category does not include waste that meets the criteria for categorization as elemental lead or lead acid batteries (see Section 4.4).

**5130 Cadmium Containing Metal Debris**

This category includes debris that is approximately 95% by volume, or more, metal and contain bulk, separable or bonded, cadmium as part of the matrix. This category includes debris that is essentially entirely elemental cadmium, such as cadmium sheets. This category does not include cadmium batteries (see Section 4.4).

**5190 Uncategorized Metal Debris**

This category includes debris that is consistent with the definition for category 5100 but;

- 1) lack adequate characterization information for assignment into one of the 5110 through 5130 categories, or
- 2) contain both lead and cadmium, separable or bonded, as part of the bulk matrix.

**5200 Inorganic Non-Metal Debris**

This category includes waste that is approximately 95% by volume, or more, inorganic nonmetal debris.

**5210 Concrete Debris**

This category includes debris that is approximately 95% by volume, or more, concrete. An example of waste that might be included in this category is concrete chunks and blocks from decontamination and decommissioning activities. This category does not include waste solidified with cementitious stabilization agents (see Section 4.2).

**5220 Glass Debris**

This category includes debris that is approximately 95% by volume, or more, glass. Examples of waste that might be included in this category is leaded glass windows, bottles, or light bulbs. Crushed glass may be included in this category provided it meets the EPA particle size criteria for classification as debris.

**5230 Ceramic/Brick Debris**

This category includes debris that is approximately 95% by volume, or more, ceramic or brick materials. Examples of waste that might be included in this category are bricks, ceramic crucibles, and ceramic refractories.

**5240 Rock Debris**

This category includes debris that is approximately 95% by volume, or more, rock or gravel materials provided the particle size meets the EPA criteria for classification as debris.

**5250 Asbestos Debris**

This category includes debris that is approximately 95% by volume, or more, asbestos or asbestos based materials. Examples of waste that might be included in this category are asbestos containing gloves, firehoses, aprons, flooring tiles, pipe insulation, boiler jackets, and laboratory tabletops.

**5290 Uncategorized Inorganic Non-Metal Debris**

This category includes debris that is consistent with the definition for category 5200 but;

- 1) lack adequate characterization information for assignment into one of the 5210 through 5250 categories, or
- 2) inconsistent with the definitions for categories 5210 through 5250, or
- 3) is a mixture of the debris materials included in categories 5210 through 5250 with none contributing approximately 95% by volume, or more, to the matrix.

**5300 Combustible Debris**

This category includes debris that is approximately 95% by volume, or more, combustible materials. Examples of combustible debris are materials constructed of plastic, rubber, wood, paper, cloth, and graphite and biological materials.

**5310 Plastic/Rubber Debris**

This category includes debris that is approximately 95% by volume, or more, plastic and/or rubber materials. Examples of waste that might be included in this category

are plastic or rubber sheeting, containers, gloves, gaskets, and components of benelex or plexiglass.

**5311 Leaded Gloves/Aprons Debris**

This category includes debris that is approximately 95% by volume, or more, rubber materials which contain a high fraction of lead or lead compounds. Examples of waste that might be included in this category are leaded glovebox gloves or aprons.

**5312 Halogenated Plastic Debris**

This category includes debris that is approximately 95% by volume, or more, plastic/rubber materials which contain halogenated plastics, such as PVC, as part of the matrix.

**5313 Nonhalogenated Plastic Debris**

This category includes debris that is approximately 95% by volume, or more, plastic/rubber materials, excluding leaded gloves and aprons, which do not contain halogenated plastics as part of the matrix.

**5319 Uncategorized Plastic/Rubber Debris**

This category includes debris that is consistent with the definition for category 5310 but;

- 1) lack adequate characterization information for assignment into one of the 5311 through 5313 categories, or
- 2) inconsistent with the definitions for categories 5311 through 5313, or
- 3) is a mixture of the debris materials included in categories 5311 through 5313 with none contributing approximately 95% by volume, or more, to the matrix.

**5320 Wood Debris**

This category includes debris that is approximately 95% by volume, or more, wood or wood products other than paper. Examples of waste that might be included in this category are structural timbers, boxes, or pallets.

**5330 Paper/Cloth Debris**

This category includes debris that is approximately 95% by volume, or more, paper or cloth materials. Examples of waste that might be included in this category are protective clothing, rags, or wipes. Rags and wipes may contain some absorbed organic or aqueous liquids.

**5340 Graphite Debris**

This category includes debris that is approximately 95% by volume, or more, graphite based solid materials. Examples of waste that might be included in this category are crucibles, graphite components, and pure graphite.

**5350 Biological Debris**

This category includes debris that is approximately 95% by volume, or more, biological materials, including any chemical agents such as lime or formaldehyde.

Examples of waste that might be included in this category are biological samples and animal carcasses.

**5390 Uncategorized Combustible Debris**

This category includes debris that is consistent with the definition for category 5300 but;

- 1) lack adequate characterization information for assignment into one of the 5310 through 5350 categories, or
- 2) inconsistent with the definitions for categories 5310 through 5350, or
- 3) is a mixture of the debris materials included in categories 5310 through 5350 with none contributing approximately 95% by volume, or more, to the matrix.

**5400 Heterogeneous Debris**

This category includes waste that is at least 50% by volume debris materials which do not meet the criteria for assignment into categories 5100, 5200, or 5300 and associated subcategories. An example is waste that is essentially entirely debris but is not dominant (i.e. approximately 95% by volume, or more) in either metal, inorganic nonmetal, or combustible debris materials. Another example is waste that is at least 50% by volume debris materials with the balance being soil or solid process residues.

**5410 Composite Filters**

This category includes debris that is approximately 50% by volume, or more, HEPA or other filters constructed of more than one material type (i.e. metal, inorganic nonmetal, and combustible). Filters constructed of a single material type are assigned into the appropriate metal, inorganic nonmetal, combustible, or heterogeneous debris category depending on the composition of the entire waste matrix.

**5420 Predominantly Metal Debris**

This category includes debris that contains approximately 50% by volume, or more, but less than approximately 95% by volume metal materials. The balance of the matrix may be other types of debris materials (i.e. inorganic nonmetal, combustible), soil, or solid process residues.

**5430 Predominantly Inorganic Non-Metal Debris**

This category includes debris that contains approximately 50% by volume, or more, but less than approximately 95% by volume inorganic nonmetal materials. The balance of the matrix may be other types of debris materials (i.e. metal, combustible), soil, or solid process residues.

**5440 Predominantly Combustible Debris**

This category includes debris that contains approximately 50% by volume, or more, but less than approximately 95% by volume combustible materials. The balance of the matrix may be other types of debris materials (i.e. metal, inorganic nonmetal), soil, or solid process residues.

**5450 Asphalt Debris**

This category includes debris that is approximately 50% by volume, or more, asphalt or other bituminous materials. Examples of waste that might be included in this category are asphalt materials from roadways shingles, bituminous cement or other materials containing both tar and gravel.

**5490 Uncategorized Heterogeneous Debris**

This category includes debris that is consistent with the definition for category 5400 but;

- 1) lack adequate characterization information for assignment into one of the 5410 through 5450 categories, or
- 2) inconsistent with the definitions for categories 5410 through 5450, or
- 3) is a mixture of heterogeneous debris materials included in categories 5410 through 5450 with none contributing approximately 50% by volume, or more, to the matrix.

### 4.3 SPECIFIC WASTE FORMS

These categories address certain waste forms which require specific treatment technologies not expected to be common with other waste forms. Specific waste forms are initially categorized according to the general classifications of special waste or inherently hazardous waste. Figure 3 shows these general classifications and associated categories. Following are the category definitions.

#### 4.3.1 Special Waste

**6000 Special Waste**

This category includes various specific waste forms which will require specific treatment methods that are not expected to be common with other waste forms. The waste forms include lab packs, reactive metals, explosives, and compressed gases and aerosols.

**6100 Lab Packs**

This category includes waste packaged as lab packs. In this guidance, lab packs are defined as waste with inner containers of free liquids or solid chemicals surrounded by absorbents and packaged within a larger outer container. The absorbents can be solid process residues materials or debris. Examples of absorbent materials include rags, vermiculite, diatomaceous earth, and paper wipes. This category does not include lab packs of elemental liquid mercury (see Section 4.3.2).

**6110 Organic Lab Packs**

This category includes lab packs that contain only organic liquids. This category does not include organic scintillation fluids contained in vials that are packaged in a lab pack configuration (see Category 6140).

**6120 Aqueous Lab Packs**

This category includes lab packs that contain only aqueous liquids. This category does not include aqueous scintillation fluids contained in vials that are packaged in a lab pack configuration (see Category 6140).

**6130 Solid Lab Packs**

This category includes lab packs of only solid chemicals or other solid materials.

**6140 Scintillation Cocktails**

This category includes scintillation fluids contained in vials that are packaged in a lab pack configuration.

**6190 Uncategorized Lab Packs**

This category includes lab packs that;

- 1) lack adequate characterization information for assignment into one of the 6110 through 6140 categories, or
- 2) are inconsistent with the definitions for categories 6110 through 6140, or
- 3) contain two, or more, of the above listed specific lab pack category materials (organic liquids, aqueous liquids, and solid chemicals).

**6200 Reactive Metals**

This category includes reactive metal waste. In this guidance, these are defined as waste meeting the criteria for classification as water reactive or ignitable reactive per the Third Third LDR rule (55FR 22545 and 22553). Typically these waste streams are sodium metal or sodium metal alloys, but can also include particulate fines of aluminum, uranium, zirconium, or other pyrophoric materials. The waste may be mixed with stabilizing materials.

**6210 Bulk Reactive Metals**

This category includes waste that is essentially bulk reactive metals and meets the criteria for classification as water reactive per the Third Third LDR rule. Typically this waste is sodium metal or sodium metal alloys.

**6220 Components Contaminated with Reactive Metals**

This category includes piping, pumps and other retired equipment waste that is considered water reactive per the Third Third LDR rule due to reactive metal contamination. The bulk of the material is not reactive metals, but the reactive metals require treatment before disposal.

**6230 Pyrophoric Fines**

This category includes waste that is essentially bulk materials which meets the criteria for classification as ignitable reactive per the Third Third LDR rule. Examples are fines of aluminum, uranium, zirconium, or other pyrophoric materials. The waste may be mixed with stabilizing materials.

**6290 Uncategorized Reactive Metals**

This category includes reactive metal waste with characteristics that are not consistent with the definitions for categories 6210 through 6230.

**6300 Explosives/Propellants**

This category includes waste consisting of substances which undergo rapid chemical transformations which produce large amounts of gases and heat. The gases rapidly expand at velocities exceeding the speed of sound (due to the heat of reaction), which creates a shock

115

wave and explosion. Waste that meets this definition should be identified here regardless of the specific physical form. Liquid nitroglycerine, for instance, should be categorized as explosive and not organic liquid. Similarly, TNT would be categorized as explosive rather than solid process residue.

**6400 Compressed Gases/Aerosols**

This category includes waste meeting the criteria for classification as ignitable compressed gases per the Third LDR rule (55FR 22545). Typically, this is waste consisting of pressurized gas cylinders or aerosol cans. Depressurized gas cylinders or aerosol cans would not be included in this category. These would be categorized into the appropriate debris category (see Section 4.2.2).

**4.3.2 Inherently Hazardous Waste**

**7000 Inherently Hazardous Waste**

This category includes waste in which the entire matrix is hazardous, such as elemental lead, or which the entire waste form is regulated, such as batteries.

**7100 Elemental Mercury**

This category includes waste that is bulk, pourable liquid mercury. The liquid mercury may be packaged in small containers within a larger container holding other materials (e.g. lab pack configuration).

**7200 Elemental Lead**

This category includes waste that contain at least 50% by volume bulk elemental lead. Examples of waste in this category are lead bricks, sheets, and pipes.

**7210 Non-Activated Lead**

This category includes waste meeting the above criteria for categorization as elemental lead in which the elemental lead shapes are only surface contaminated with radionuclides.

**7220 Activated Lead**

This category includes waste meeting the above criteria for categorization as elemental lead in which the elemental lead shapes are activated.

**7300 Beryllium Waste**

This category includes waste that is essentially beryllium dust or beryllium chips and fines that may also contain beryllium dust. This category does not include debris waste that is contaminated with beryllium dust.

**7400 Batteries**

This category includes waste consisting of batteries. The batteries may be packaged with absorbent materials (e.g. particulates, rags, etc.).

**7410 Lead Acid Batteries**

This category includes waste consisting of drained or undrained lead acid batteries.

**7420 Cadmium Batteries**

This category includes waste consisting of cadmium batteries.



**7490 Uncategorized Batteries**

This category includes waste consisting of batteries that;

- 1) lack adequate characteristic information to determine battery type, or
- 2) is of a type other than lead acid or cadmium, or
- 3) is a mixture of the above, or other, types.

## **4.4 UNKNOWN MATRIX**

These categories address waste with insufficient characterization information to enable assignment into any of the categories addressed in Sections 4.1, 4.2, and 4.3. The categories are shown in Figure 3. Following are the category definitions.

### **4.4.1 Unknown Matrix**

#### **8000 Unknown Matrix**

There are three unknown matrix subcategories as defined below.

##### **8100 Unknown Liquids**

This category includes bulk liquid or slurry waste which can not be further categorized as aqueous or organic (see Section 4.1) because it is not known if the TOC level is less, or greater than 1%.

##### **8200 Unknown Solids**

This category includes solid waste for which insufficient characterization information exists to further categorize as a solid process residue, soil, or debris per the definitions of Section 4.2.

##### **8900 Uncategorized Unknown**

This category includes waste for which insufficient characterization information is known to enable categorization as a liquid or solid (see Sections 4.1 and 4.2) or as one of the specific waste forms (see Section 4.3).

## **4.5 FINAL WASTE FORMS**

These categories address final waste forms that meet disposal criteria, including applicable LDR treatment standards. Figure 3 shows the categories. Following are the category definitions.

### **4.5.1 Final Waste Forms**

#### **9000 Final Waste Forms**

There are five subcategories of final waste forms as defined below.

##### **9100 Cement Forms**

This category includes waste that has been immobilized with grout or other cement type binders and meet disposal criteria, including applicable LDR treatment standards.

**9200 Vitrified Forms**

This category includes waste that has been immobilized via vitrification and meet disposal criteria, including applicable LDR treatment standards.

**9300 Metal Forms**

This category includes metal waste that has been consolidated or decontaminated and are ready for disposal or recycle.

**9400 Polymer Forms**

This category includes waste that has been immobilized with organic binders and meet disposal criteria, including applicable LDR treatment standards.

**9900 Other Forms**

This category includes all other final waste forms not addressed by categories 9100 through 9400 which meet disposal criteria, including applicable LDR treatment standards. Examples are amalgamated mercury and macroencapsulated lead.

## 5. CONTAMINANT PARAMETER

This section presents the categories and definitions for the contaminant parameter and instructions for assigning these categories. The contaminant categories are identified by the waste regulatory authority(s) and, for Federally RCRA regulated waste, is further defined by the types of hazardous contaminants and characteristics associated with the waste. These categories influence the treatment requirements for the waste from both a technical and regulatory perspective.

The regulatory authority classifications, used to identify the contaminant parameter, are as follows:

- Federally RCRA Regulated
- TSCA (PCB) Regulated
- State Regulated Hazardous Waste

The contaminant parameter is represented by a combination of all of the specific categories that are applicable to the waste. A waste stream may have more than one applicable contaminant category. The contaminant categories are shown in Figure 4.

A complete treatability group assignment for the contaminant parameter is represented by listing the combined contaminant categories that are applicable to the waste. The applicable categories should be listed in the following order:

Organics	ORG
Metals	MET or MHG
Ignitable	I1...I9
Corrosive	C9
Reactive	R9
TSCA Regulated	PCB
State Regulated	ST

Various combinations of the contaminant categories can result in numerous possible contaminant parameters for Federally RCRA regulated waste. Following are the more specific category definitions.

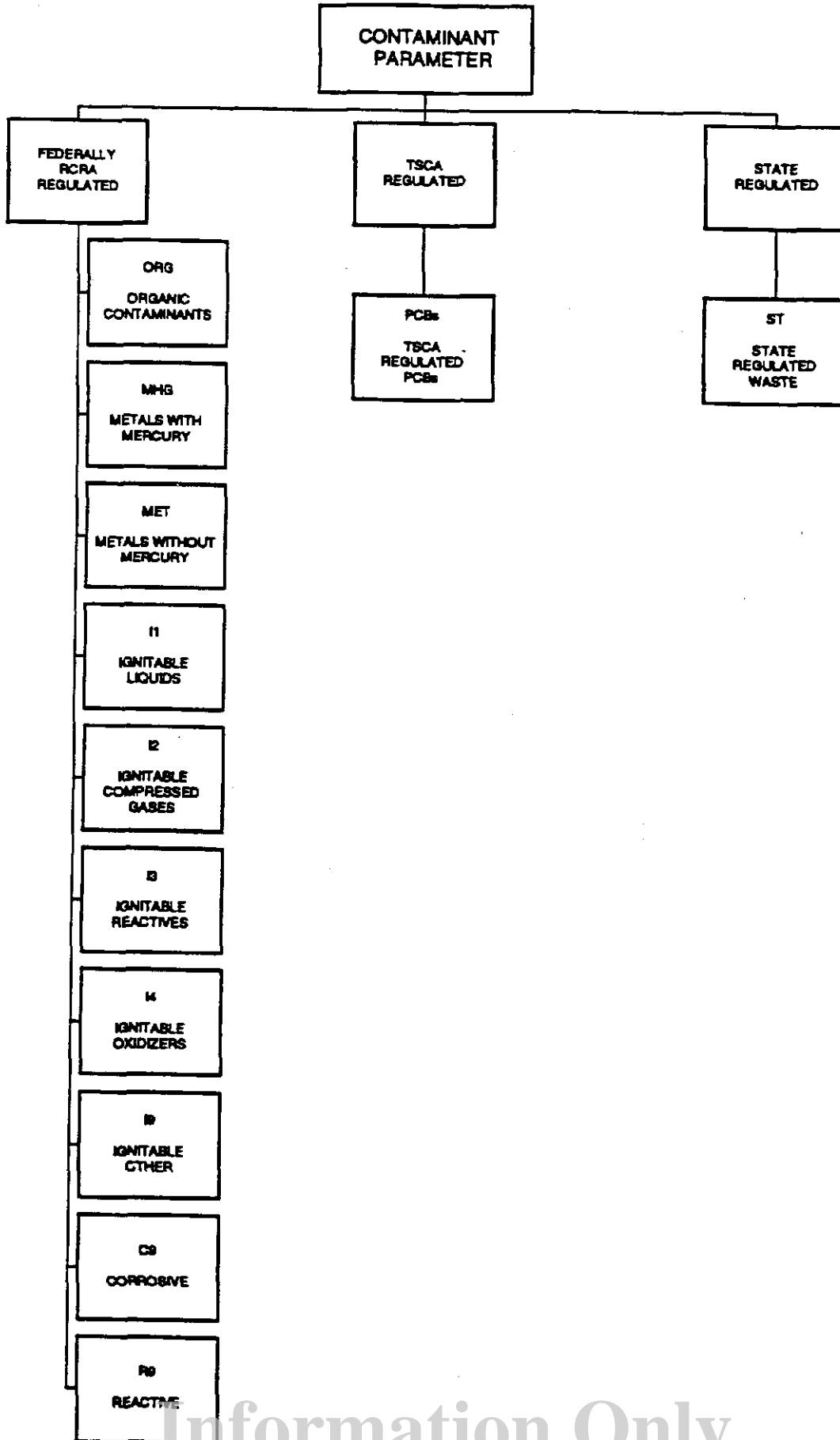
### 5.1 FEDERALLY RCRA REGULATED

These wastes are hazardous pursuant to RCRA regulations promulgated by the EPA (i.e., 40 CFR 261). The contaminant parameter for waste in this regulatory authority classification are defined by five categories including:

- hazardous organics,
- metals,
- ignitability,
- corrosivity, and
- reactivity.

Following are the guidelines for determining the contaminant categories.

Figure 4. Contaminant Parameter Categories



Information Only

140

### 5.1.1 Organic Contaminants

#### **ORG Organics**

This category includes Federally RCRA regulated waste if the waste is assigned one, or more, of the EPA codes in Appendix A, Tables A-1 through A-8 indicating the presence of hazardous organics. The organic component is not included in cases where the only indicator of organic contamination is the presence of a listed EPA code for which LDR treatment standards have been met.

### 5.1.2 Metal Contaminants

#### **MHG Metals With Mercury**

This category includes Federally RCRA regulated waste if the waste is assigned one, or more, EPA hazardous waste codes indicating the presence of toxic metals, but specifically mercury, identified in Appendix A, Table A-12. Mercury is specifically emphasized over other toxic metals because of its prevalence in DOE waste and its effect on appropriate treatment technology selection, particularly with respect to effluent controls and recovery. This category is not included in cases where the only indicator of metal contamination is the presence of a listed EPA code for which LDR treatment standards have been met.

#### **MET Metals Without Mercury**

This category includes Federally RCRA regulated waste if the waste is assigned one, or more, EPA hazardous waste codes indicating the presence of toxic metals but does not include mercury, identified in Appendix A, Tables A-9 through A-11, but none of the EPA codes in Appendix A, Table A-12. This category is not included in cases where the only indicator of metal contamination is the presence of a listed EPA code for which LDR treatment standards have been met.

### 5.1.3 Ignitable Characteristic

#### **I1 Ignitable Liquids**

This category includes waste that is assigned the EPA hazardous waste code which indicates the characteristic of ignitability, D001, and meets the definition of ignitable liquids in the Third Third LDR rule (55 FR 22543).

#### **I2 Ignitable Compressed Gases**

This category includes waste that is assigned the EPA hazardous waste code which indicates the characteristic of ignitability, D001, and meets the definition of ignitable compressed gases in the Third Third LDR rule (55 FR 22543).

#### **I3 Ignitable Reactives**

This category includes waste that is assigned the EPA hazardous waste code which indicates the characteristic of ignitability, D001, and meets the definition of ignitable reactives in the Third Third LDR rule (55 FR 22543).

#### **I4 Ignitable Oxidizers**

This category includes waste that is assigned the EPA hazardous waste code which indicates the characteristic of ignitability, D001, and meets the definition of ignitable oxidizers in the Third Third LDR rule (55 FR 22543).

### **I9 Ignitable Other**

This category includes waste that is assigned the EPA hazardous waste code which indicates the characteristic of ignitability, D001, but;

- 1) lacks adequate characterization information for assignment into one of the other ignitable categories, or
- 2) is a mixture of the other ignitable categories.

### **5.1.4 Corrosive Characteristic**

#### **C9 Corrosive**

This category includes Federally RCRA regulated waste if the waste exhibits the characteristic of corrosivity as defined in 40 CFR 261 and is assigned the EPA hazardous waste code D002. More specific subcomponents of corrosivity to represent the LDR subcategories of acid, alkaline, and other are not included. The majority of waste that exhibits the characteristic of corrosivity will be acidic or basic aqueous liquids. These more specific corrosive characteristics are identified through assignment of the matrix category (see Section 4.1).

### **5.1.5 Reactive Characteristic**

#### **R9 Reactive**

This category includes Federally RCRA regulated waste if the waste exhibits the characteristic of reactivity as defined in 40 CFR 261 and is assigned the EPA hazardous waste code D003. More specific subcomponents of reactivity to represent the LDR subcategories of reactive cyanides, reactive sulfides, reactive explosives, water reactives and other reactives are not included. These specific characteristics of reactivity are, in most cases, identified through assignment of the matrix category (see Sections 4.1 and 4.3).

## **5.2 TSCA (PCB) REGULATED PCBS**

### **PCB TSCA**

This category includes waste that is subject to TSCA regulation due to the presence of PCBs.

## **5.3 STATE REGULATED HAZARDOUS WASTE**

### **ST State Regulated**

This category includes waste that is defined as hazardous only under State regulations. Due to variations in the more stringent State regulations, this guidance does not propose a method of establishing more detailed contaminant categories based on State hazardous waste codes.

## 6. METHODOLOGY APPLICATION

This section provides some sample applications to demonstrate the treatability group assignment process. This section also provides examples of complete treatability group names.

### 6.1 SAMPLE APPLICATIONS

#### Example 1

##### *Waste Data*

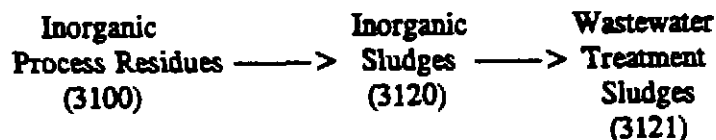
A waste stream is comprised of several 55 gallon drums containing waste from closure of a wastewater treatment facility. Physically, the waste is sludge consisting of metal hydroxide precipitates and water. On average, each drum contains over 90%, by volume, sludge.

Radiologically, the waste contains low-levels of miscellaneous fission products with exposure rates < < 100 mR/hr at drum surface. The waste contains transuranic isotopes < < 10 nCi/g. Sampling and analysis revealed the waste to contain levels of barium (D005), chromium (D007), and lead (D008) regulated by the EPA. The pH of the residual liquid was measured at 12.8 (D002). The waste is not PCB contaminated.

##### *Parameter Category Assignments*

Radiologically, the waste is low-level, contact-handled, and contains transuranic isotopes < 10 nCi/g. Referring to Section 3, the radiological category code for the waste is LL/CH/BG.

Referring to Section 4.1, the matrix characteristics meet the criteria for categorization as a process residue solid (Category 3000). The matrix characteristics further meet the criteria for assignment to the following successive subcategories associated with homogeneous solids:



Categorizing to the lowest level of detail, the matrix category is Wastewater Treatment Sludges.

Based on the EPA codes, the applicable components for defining the contaminant category are metals and corrosive. For metals, the most specific, applicable subcomponent is Metals Without Mercury (MET). Therefore, the contaminant category code for the waste is MET/C9.

#### Example 2

##### *Waste Data*

A waste stream is comprised of several 55 gallon drums containing "legacy" waste from past plutonium processing operations. Physically, each drum contains over 75% by volume of material meeting the LDR criteria for classification as debris. Available data indicates that, on average, each drum contains approximately 60% by volume combustible debris materials, such as plastic, paper and rags. On average,

123

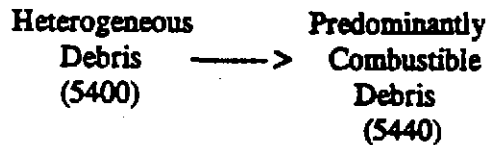
the balance of each drum is approximately 20% by volume metal debris materials and 20% by volume vermiculite added as a drum filler.

Radiologically, the waste was considered transuranic when generated due to the presence of  $\approx 80$  nCi/g transuranic isotopes. Presently, however, the waste is considered low-level. The beta-gamma activity level is negligible. Based as process knowledge, the waste was assigned the F002 and D008 EPA codes. The waste is not PCB contaminated.

#### ***Parameter Category Assignment***

Radiologically, the waste is low-level, contact-handled, and contains transuranic isotopes  $> 10$  nCi/g. Referring to Section 3, the radiological parameter category code is **LL/CH/TAL**.

Referring to Section 4.1, the matrix characteristics meet the criteria for categorization as debris (Category 5000). The matrix characteristics further meet the criteria for assignment to the following successive subcategories associated with debris:



Categorizing to the lowest level of detail, the matrix category is **Predominantly Combustible Debris**.

Based on the EPA codes, the applicable components for defining the contaminant category are organics and metals. For metals, the most specific, applicable subcomponent is Metals Without Mercury (MET). Therefore, the contaminant category code for the waste is **ORG/MET**.

## **6.2 EXAMPLE TREATABILITY GROUP NAMES**

The complete treatability group name for a given waste is a combination of the applicable radiological, matrix, and contaminant categories as follows:

**Radiological Category - Matrix Category - Contaminant Category**

Following this logic, the complete treatability group names for the above two examples are:

**Example 1: LL/CH/BG - Wastewater Treatment Sludges - MET/C9**

**Example 2: LL/CH/TAL - Predominantly Combustible Debris - ORG/MET**



**APPENDIX A**

**EPA CODES BY CONTAMINANT  
CATEGORY COMPONENTS**

125

**Table A-1. Nonhalogenated Toxicity Characteristic Organics**

EPA Code	Chemical Name
D018	benzene
D023	o-cresol
D024	m-cresol
D025	p-cresol
D026	cresol
D030	2,4-dinitrotoluene
D035	methyl ethyl ketone
D036	nitrobenzene
D038	pyridine

**Table A-2. Nonhalogenated Spent Solvents**

EPA Code	Chemical Name
F003	Xylene
F003	Acetone
F003	Ethyl Acetate
F003	Ethyl Benzene
F003	Ethyl Ether
F003	Methyl Isobutyl Ketone
F003	n-Butyl Alcohol
F003	Cyclohexanone
F003	Methanol
F004	Cresols
F004	Cresylic Acid
F004	Nitrobenzene
F005	Toluene
F005	Methyl Ethyl Ketone
F005	Carbon Disulfide
F005	Isobutanol
F005	Pyridine
F005	Benzene
F005	2-Ethoxyethanol
F005	2-Nitropropane

Table A-3. Nonhalogenated P & U Listed Organics

EPA Code	Chemical Name
P001	Warfarin (> 0.3%)
P002	1-Acetyl-2-thiourea
P003	Acrolein
P005	Allyl alcohol
P007	5-Aminoethyl 3-isoxazolol
P008	4-Aminopyridine
P014	Thiophenol (Benzene thiol)
P018	Brucine
P020	2-sec-Butyl-4,6-dinitrophenol
P022	Carbon Disulfide
P031	Cyanogen
P034	2-Cyclohexyl-4,6-dinitrophenol
P038	Diethylarsine
P039	Disulfoton
P040	Diethyl-p-pyrazinyl phosphorothioate
P041	Diethyl-p nitrophenyl phosphate
P042	Epinephrine
P044	Dimethoate
P045	Thiofanox
P046	alpha, alpha-Dimethylphenethylamine
P047	4,6 Dinitrocresol
P048	2,4-Dinitrophenol
P049	2,4-Dithiobiuret
P054	Aziridine
P062	Hexaethyltetraphosphate
P064	Isocyanic acid, ethyl ester
P066	Methomyl
P067	2-Methylaziridine
P068	Methyl hydrazine
P069	Methylacetonitrile
P070	Aldicarb
P071	Methyl parathion
P072	1-Naphthyl-2-thiourea
P075	Nicotine and salts
P077	p-Nitroaniline
P081	Nitroglycerin
P082	N-Nitrosodimethylamine
P084	N-Nitrosomethylvinyla-mine

Table A-3. Nonhalogenated P & U Listed Organics (Continued)

EPA Code	Chemical Name
P085	Octamethylpyrophosphoramide
P088	Endothall
P089	Parathion
P092	Phenyl Mercury Acetate
P093	N-Phenylthiourea
P094	Phorate
P097	Famphur
P101	Ethyl cyanide
P102	Propargyl alcohol
P108	Strychnine and salts
P109	Tetraethyldithiopyrophosphate
P110	Tetraethyl Lead
P111	Tetraethyl Pyrophosphate
P112	Tetranitromethane
P116	Thiosemicarbazide
U001	Acetaldehyde
U002	Acetone
U003	Acetonitrile
U004	Acetophenone
U007	Acrylamide
U008	Acrylic acid
U009	Acrylonitrile
U010	Mitomycin C
U011	Amitrole
U012	Aniline
U014	Auramine
U015	Azaserine
U016	Benz (c) acridine
U018	Benz(a)anthracene
U019	Benzene
U021	Benzidine
U022	Benzo(a)pyrene
U028	Bis(2-ethylhexyl) pthalate
U031	n-Butyl alcohol
U050	Chrysene
U051	Creosote
U052	Cresols (Cresylic acid)
U053	Crontonaldehyde

120

Table A-3. Nonhalogenated P & U Listed Organics (Continued)

EPA Code	Chemical Name
U055	Cumene
U056	Cyclohexane
U057	Cyclohexanone
U059	Daunomycin
U063	Dibenzo(a,h)anthracene
U064	1,2,7,8-Dibenzopyrene
U069	Di-n-butyl phthalate
U085	1,2,3,4-Diepoxybutane
U086	N,N-Diethylhydrazine
U087	O,O-Diethyl S-methyldithiophosphate
U088	Diethyl phthalate
U089	Diethyl stilbestrol
U090	Dihydrosafrole
U091	3,3-Dimethoxybenzidine
U092	Dimethylamine
U093	p-Dimethylaminoazobenzene
U094	7,12-Dimethyl benz(a)anthracene
U095	3,3'-Dimethylbenzidine
U096	a,a-Dimethyl benzyl hydroperoxide
U098	1,1-Dimethylhydrazine
U099	1,2-Dimethylhydrazine
U101	2,4-Dimethylphenol
U102	Dimethyl phthalate
U103	Dimethyl sulfate
U105	2,4-Dinitrotoluene
U106	2,6-Dinitrotoluene
U107	Di-n-octyl phthalate
U108	1,4-Dioxane
U109	1,2-Diphenylhydrazine
U110	Dipropylamine
U111	Di-n-propylnitrosoamine
U112	Ethyl acetate
U113	Ethyl acrylate
U114	Ethylene bis-dithiocarbamic acid
U116	Ethylene Thiourea
U117	Ethyl ether
U118	Ethyl methacrylate

**Table A-3. Nonhalogenated P & U Listed Organics (Continued)**

EPA Code	Chemical Name
U119	Ethyl methane sulfonate
U120	Fluoranthene
U122	Formaldehyde
U123	Formic acid
U124	Furan
U125	Furfural
U126	Glycidyaldehyde
U137	Indeno(1,2,3-c,d)pyrene
U140	Isobutyl alcohol
U141	Isosafrole
U143	Lasiocarpine
U144	Lead acetate
U146	Lead subacetate
U147	Maleic anhydride
U148	Maleic hydrazide
U149	Malononitrile
U152	Methacrylonitrile
U153	Methane thiol
U154	Methanol
U155	Methapyrilene
U157	3-Methylchloanthrene
U159	Methyl ethyl ketone
U160	Methyl ethyl ketone peroxide
U161	Methyl isobutyl ketone
U162	Methyl methacrylate
U163	N-Methyl N'-nitro N-Nitrosoguanidine
U164	Methylthiouracil
U165	Naphthalene
U166	1,4-Naphthoquinone
U167	1-Naphthylamine
U168	2-Naphthylamine
U169	Nitrobenzene
U170	4-Nitrophenol
U171	2-Nitropropane
U172	n-Nitroso-di-n-butylamine
U173	N-Nitroso-di-n-ethanolamine
U174	N-Nitrosodiethylamine

Table A-3. Nonhalogenated P & U Listed Organics (Continued)

EPA Code	Chemical Name
U176	N-Nitroso-N-ethylurea
U177	N-Nitroso-N-methylurea
U178	N-Nitroso-N-methylurethane
U179	N-Nitrosopiperidine
U180	N-Nitrosopyrrolidine
U181	5-Nitro-o-toluidine
U182	Paraldehyde
U186	1,3-Pentadiene
U187	Phenacetin
U188	Phenol
U189	Phosphorus sulfide
U190	Phthalic anhydride
U191	2-Picoline
U193	1,3-Propane sultone
U194	n-Propylamine
U196	Pyridine
U197	p-Benzoquinone
U200	Reserpine
U201	Resorcinol
U202	Saccharin and salts
U203	Safrole
U206	Streptozaotocin
U213	Tetrahydrofuran
U214	Thallium (I) acetate
U218	Thioacetamide
U219	Thiourea
U220	Toluene
U221	Toluenediamine
U223	Toluene diisocyanate
U234	sym-Trinitrobenzene
U236	Trypan Blue
U238	Ethyl carbamate
U239	Xylenes
U244	Thiram
U248	Warfarin ( $\geq 3\%$ )
U328	Benzenamine, 2-methyl
U353	Benzenamine, 4-methyl
U359	2-ethoxyethanol

**Table A-4. Halogenated Toxicity Characteristic Pesticides**

EPA Code	Chemical Name
D012	Endrin
D013	Lindane
D014	Methoxychlor
D015	Toxaphene
D016	2,4-D
D017	Silvex

**Table A-5. Halogenated Toxicity Characteristic Organics**

EPA Code	Chemical Name
D019	Carbon tetrachloride
D020	Chlordane
D021	Chlorobenzene
D022	Chloroform
D027	1,4-dichlorobenzene
D028	1,2-dichloroethane
D029	1,1-dichloroethylene
D031	Heptachlor
D032	Hexachlorobenzene
D033	Hexachlorobutadiene
D034	Hexachloroethane
D037	Pentachlorophenol
D039	Tetrachloroethylene
D040	Trichloroethylene
D041	2,4,5-trichlorophenol
D042	2,4,6-trichlorophenol
D043	Vinyl Chloride



**Table A-6. Halogenated Spent Solvents**

EPA Code	Chemical Name
F001	Tetrachloroethylene
F001	Trichloroethylene
F001	Methylene Chloride
F001	1,1,1-trichloroethane
F001	Carbon Tetrachloride
F002	1,1,1-trichloroethane
F002	Methylene Chloride
F002	Trichloroethylene
F002	Tetrachloroethylene
F002	Chlorobenzene
F002	1,1,2-trichloro-1,2,2-trifluoroethane
F002	Ortho-dichlorobenzene
F002	Trichlorofluoromethane
F002	1,1,2-trichloroethane

**Table A-7. Halogenated Dioxins**

EPA Code	Chemical Name
F020	Tetra- and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodi-benzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts
F021	penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives
F022	tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans
F023	tetra-, and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts
F024	Numerous chlorinated hydrocarbons; benzene; toluene; naphthalene
F025	Numerous chlorinated hydrocarbons; benzene; toluene; naphthalene
F026	tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans
F027	tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts
F028	tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts

Information Only

Table A-8. Halogenated P & U Listed Organics

EPA Code	Chemical Name
P004	Aldrin
P016	Bis(chloromethyl)-ether
P017	Bromoacetone
P023	Chloracetaldehyde
P024	p-Chloroaniline
P026	1-(o-Chlorophenyl) thiourea
P027	3-Chloro-propionitrile
P028	Benzyl chloride
P033	Cyanogen Chloride
P036	Dichloro-phenylarsine
P037	Dieldrin
P043	Diisopropylfluorophosphate(DFP)
P050	Endosulfan
P051	Endrin
P057	Fluoroacetamide
P058	Fluoroacetic acid, sodium salt
P059	Heptachlor
P060	Isodrin
P095	Phosgene
P118	Trichloromethanethiol
P123	Toxaphene
U005	2-Acetylamino fluorene
U006	Acetyl Chloride
U017	Benzal chloride
U020	Benzenesulfonyl chloride
U023	Benzotrichloride
U024	bis(2-Chloroethoxy) methane
U025	bis(2-Chloroethyl) ether
U026	Chlornaphazin
U027	bis(2-Chloroisopropyl) ether
U029	Bromomethane
U030	4-Bromophenyl phenyl ether
U033	Carbonyl fluoride
U034	Trichloroacetaldehyde
U035	Chlorambucil
U036	Chlordane (alpha and gamma)
U037	Chlorobenzene
U038	Chlorobenzilate

134

**Table A-8. Halogenated P & U Listed Organics (Continued)**

EPA Code	Chemical Name
U039	p-Chloro-m-cresol
U041	1-Chloro-2,3-epoxypropane
U042	2-Chloro ethyl vinyl ether
U043	Vinyl chloride
U044	Chloroform
U045	Chloromethane
U046	Chloromethyl methyl ether
U047	2-Chloronaphthalene
U048	2-Chlorophenol
U049	4-Chloro-o-toluidine hydrochloride
U058	Cyclophosphamide
U060	DDD
U061	DDT
U062	Diallate
U066	1,2-Dibromo-3-chloropropane
U067	1,2-Dibromoethane
U068	Dibromomethane
U070	o-Dichlorobenzene
U071	m-Dichlorobenzene
U072	p-Dichlorobenzene
U073	3,3-Dichlorobenzidine
U074	cis-1,4-Dichloro-2-butene
U075	Dichlorodifluoromethane
U076	1,1-Dichloroethane
U077	1,2-Dichloroethane
U078	1,1-Dichloroethylene
U079	1,2-Dichloroethylene
U080	Methylene chloride
U081	2,4-Dichlorophenol
U082	2,6-Dichlorophenol
U083	1,2-Dichloropropane
U084	1,3-Dichloropropene
U097	Dimethylcarbonyl chloride
U121	Trichloromonofluoromethane
U127	Hexachlorobenzene
U128	Hexachlorobutadiene
U129	Lindane
U130	Hexachlorocyclopentadiene

Table A-8. Halogenated P & U Listed Organics (Continued)

EPA Code	Chemical Name
U131	Hexachloroethane
U132	Hexachlorophene
U138	Iodomethane
U142	Kepone
U150	Melphalan
U156	Methyl chlorocarbonate
U158	4,4'-Methylene-bis-(2-chloroaniline)
U183	Pentachlorobenzene
U184	Pentachloropethane
U185	Pentachloronitrobenzene
U192	Pronamide
U207	1,2,4,5-Tetrachlorobenzene
U208	1,1,1,2-Tetrachloroethane
U209	1,1,2,2-Tetrachloroethane
U210	Tetrachlorethylene
U211	Carbon tetrachloride
U222	o-Toluidine hydrochloride
U225	Tribromomethane
U226	1,1,1-Trichloroethane
U227	1,1,2-Trichloroethane
U228	Trichloroethylene
U235	tris-(2,3-Dibromopropyl)-phosphate
U237	Uracil mustard
U240	2,4-Dichlorophenoxyacetic acid
U243	Hexachloropropene
U246	Cyanogen Bromide
U247	Methoxychlor

**Table A-9. Toxicity Characteristic Metals Without Mercury**

EPA Code	Regulated Metals
D004 D005 D006 D007 D008 D010 D011	Arsenic Barium Cadmium Chromium Lead Selenium Silver

**Table A-10. Plating Waste Metals Without Mercury**

EPA Code	Regulated Metal
F006	Cadmium, Chromium, Lead, Nickel, Silver
F007	Cadmium, Chromium, Lead, Nickel, Silver
F008	Cadmium, Chromium, Lead, Nickel, Silver
F009	Cadmium, Chromium, Lead, Nickel, Silver

**Table A-11. P & U Listed Waste - Metals Without Mercury**

EPA Code	Chemical Name	Regulated Metal
P010	Arsenic acid	Arsenic
P011	Arsenic pentoxide	Arsenic
P012	Arsenic trioxide	Arsenic
P013	Barium cyanide	Barium
P015	Beryllium dust	Beryllium
P036	Dichloro-phenylarsine	Arsenic
P038	Diethylarsine	Arsenic
P073	Nickel Carbonyl	Nickel
P087	Osmium tetroxide	Osmium Tetroxide
P099	Potassium silver cyanide	Silver
P103	Selenourea	Selenium
P104	Silver cyanide	Silver
P110	Tetraethyl Lead	Lead
P113	Thallic oxide	Thallium
P114	Thallium selenite	Selenium
P115	Thallium (I) sulfate	Thallium
P119	Ammonia vanadate	Vanadium
P120	Vanadium petoxide	Vanadium
U032	Calcium chromate	Chromium
U136	Cacodylic acid	Arsenic
U144	Lead acetate	Lead
U145	Lead phosphate	Lead
U146	Lead subacetate	Lead
U204	Selenium dioxide	Selenium
U205	Selenium sulfide	Selenium
U215	Thallium (I) Carbonate	Thallium
U216	Thallium (I) Chloride	Thallium
U214	Thallium (I) acetate	Thallium
U217	Thallium (I) nitrate	Thallium

**Table A-12. Mercury EPA Codes**

EPA Code	Chemical Name
D009 P065 P092 U151	Mercury Mercury Fulminate Phenyl Mercury Acetate Mercury

**Table A-13. Listed EPA Codes - Cyanides**

EPA Code	Chemical Name
F006	Plating Wastes
F007	Plating Wastes
F008	Plating Wastes
F009	Plating Wastes
P013	Barium cyanide
P021	Calcium Cyanide
P029	Copper cyanide
P030	Cyanides (soluble salts, complexes)
P063	Hydrogen cyanide
P074	Nickel cyanide
P098	Potassium cyanide
P099	Potassium silver cyanide
P104	Silver cyanide
P106	Sodium cyanide
P121	Zinc cyanide

**APPENDIX D**

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**Information Only**



## APPENDIX D NON RADIONUCLIDE INVENTORY DATA SUMMARY

This Appendix presents a summary of the IDCs used in this report from the Non Radionuclide Inventory Database. The appendix is divided into two sections. The first section presents data for the IDCs used for solidified waste streams and the second section presents data for the IDCs used for heterogeneous and soil waste streams.

This appendix contains a summary of the data and does not present details on individual elements or chemical compounds which were listed for some IDCs. Instead this data presents data for chemical forms such as inorganics, organics, etc.

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SUMMARY OF NON RADIONUCLIDE INVENTORY DATA  
FOR ARGONNE NATIONAL LABORATORY - EAST

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## Non Radionuclide Inventory Data

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**Waste Form Description:** COMBUSTIBLE WASTE (DDW >75% COMBUSTIBLE SOLIDS)

**SITE:** Argonne National Laboratory - East

**Generator:** AE

**Storage Site:** ID

**IDC:** 120

**Container Type:** SWB

**Container Volume:** 1.9 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES	300	450	680
GLASS		5	20
METALS		70	120

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** COMBUSTIBLE WASTE (DDW >75% NONCOMBUSTIBLE SOLI

**SITE:** Argonne National Laboratory - East

**Generator:** AE

**Storage Site:** ID

**IDC:** 121

**Container Type:** SWB

**Container Volume:** 1.9 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES	50	120	230
FILTER MEDIA		4	8
GLASS		50	160
INORGANICS		10	100
METALS	400	500	700

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** COMBUSTIBLE WASTE (RGW >75% COMBUSTIBLE SOLIDS)

**SITE:** Argonne National Laboratory - East

**Generator:** AE

**Storage Site:** ID

**IDC:** 110

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES	30	68	90
GLASS		1	4
METALS		1	3

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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLIDIFIED LABORATORY WASTE (ABSORBED LIQUIDS)

**SITE:** Argonne National Laboratory - East

**Generator:** AE

**Storage Site:** ID

**IDC:** 131

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
INORGANIC SOLIDS	21	21	21
SLUDGES/LIQUIDS	56	66	75

Information Only

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**SUMMARY OF NON RADIONUCLIDE INVENTORY DATA  
FOR IDAHO NATIONAL ENGINEERING LABORATORY**

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147

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## Non Radionuclide Inventory Data

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**Waste Form Description:** METAL WASTE - (70-72)UNLEACHED LIGHT NON-SS (Fe,Cu,A

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC :** 480

**Container Type:** DRUM

**Container Volume:** 0.222 m3

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		5	15
GLASS		0.5	
INORGANICS		6	
METALS		68.5	
ORGANICS		0.001	0.6

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLID INORGANIC WASTE - (70-72) FIREBRICK

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 371

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		10	
INORGANICS		119	
ORGANICS		0.0005	0.005

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## Non Radionuclide Inventory Data

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**Waste Form Description:** PYROCHEMICAL SALT WASTE - (72>) ELECTROREFINING SA

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 411

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
ELEMENTS/COMPOUNDS		17.3	
INORGANICS		4	

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** LEADED RUBBER GLOVES AND APRONS (72>)

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 339

**Container Type:** DRUM

**Container Volume:** 0.208 m3

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES	12	60	105
INORGANICS	1	6	15
METALS	12	53	105

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLID ORGANIC WASTE - (<72)BENELEX AND PLEXIGLAS

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 302

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		70	
GLASS		5	
INORGANICS		13	
METALS		2	

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** FILTER WASTE - (70-72)ABSOLUTE FILTERS

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 335

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
FILTERS	10	33	100
INORGANICS		2	4
ORGANICS		0.005	0.042

Information Only

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## Non Radionuclide Inventory Data

---

**Waste Form Description:** FILTER WASTE - (70-72)CWS FILTERS

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 490

**Container Type:** DRUM

**Container Volume:** 0.228 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		2	
FILTERS		49	
INORGANIC COMPOUND		4	6
ORGANICS		0.025	0.064

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** GRAPHITE WASTE - MOLDS (<72 FNDRY)

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 300

**Container Type:** DRUM

**Container Volume:** 0.213 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
GRAPHITE	10	71	170
INORGANIC SOLIDS		6	
ORGANICS		0.001	0.012

Information Only

## Non Radionuclide Inventory Data

Waste Form Description: GLASS WASTE - GLASS (70-72)

SITE: Idaho National Engineering Laboratory

Generator: RF

Storage Site: ID

IDC : 440

Container Type: DRUM

Container Volume: 0.227 m3

### Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		5	
GLASS		63	
INORGANICS		3	
ORGANICS		0.00001	

Information Only



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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLID INORGANIC WASTE - (70-72)LECO CRUCIBLES

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 370

**Container Type:** DRUM

**Container Volume:** 0.208 m3

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
INORGANICS	10	110	260

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** GRAPHITE WASTE - (72>)SCARFED CHUNKS

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 303

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
GRAPHITE	8	67	87
INORGANICS		6	

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** HEAVY NON-SPECIAL SOURCE METALS (<72 - FOUNDRY)

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 320

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

**Waste Contents Kg/Container**

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
INORGANICS		4	
METALS	10	58	220

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** FILTER WASTE - (72>) PROCESSED FILTER MEDIA

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 376

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

**Waste Contents Kg/Container**

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		3	8
FILTERS	5	38	110
INORGANICS		15	25
METALS		1	5
ORGANICS		0.00016	0.092

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** ORGANIC SOLID WASTE - (70-72) BLACKTOP, CONCRETE, SA

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 374

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		5	
INORGANICS	20	135	300
ORGANICS		0.000495	0.18

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLID INORGANIC WASTE - (72-) OIL-DRI

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 375

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		8	
INORGANICS	45	116	200
METALS		1	
ORGANICS		0.5	13.5

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLID INORGANIC WASTE - (72>) FIREBRICK, COARSE

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 377

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		20	
INORGANICS	45	56	67

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** GRAPHITE WASTE - COARSE (72>)

**SITE:** Idaho National Engineering Laboratory

**Generator:** RF

**Storage Site:** ID

**IDC:** 312

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
GRAPHITE	6	55	70
INORGANICS		6	
ORGANICS		0.001	0.0035

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLIDIFIED SOLUTIONS (1973-'79)

**SITE:** Idaho National Engineering Laboratory

**Generator:** BC

**Storage Site:** ID

**IDC:** 204

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
INORGANICS		115.7	
SLUDGES/LIQUIDS		113.6	

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** HIGH LEVEL SLUDGE/CEMENT (1972>)

**SITE:** Idaho National Engineering Laboratory

**Generator:** MD

**Storage Site:** ID

**IDC:** 836

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		11.9	
SLUDGES/LIQUIDS		119.2	

Information Only

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**SUMMARY OF NON RADIONUCLIDE INVENTORY DATA  
FOR LOS ALAMOS NATIONAL LABORATORY**

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**Information Only**

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## Non Radionuclide Inventory Data

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**Waste Form Description:** METAL WASTE - NONCOMBUSTIBLES (DRUM)

**SITE:** Los Alamos National Laboratory

**Generator:** LA

**Storage Site:** LA

**IDC:** 005

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES	3	24.6	50
GLASS		0.1	1
GRAPHITE		0.0005	0.1
METALS	50	56	205

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** MIXED METAL SCRAP AND INCIDENTAL COMBUSTIBLES (S

**SITE:** Los Alamos National Laboratory

**Generator:** LA

**Storage Site:** LA

**IDC:** 001

**Container Type:** SWB

**Container Volume:** 1.9 m3

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES	500	524	580
FILTERS		12	
GLASS		40	
METALS		2757.2	

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** CEMENTED AQUEOUS WASTE

**SITE:** Los Alamos National Laboratory

**Generator:** LA

**Storage Site:** LA

**IDC:** 002

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
INORGANIC SOLIDS	130	130	130
SLUDGES/LIQUIDS	250	260	265

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** DEWATERED SLUDGE - SOLIDIFIED AQUEOUS WASTE

**SITE:** Los Alamos National Laboratory

**Generator:** LA

**Storage Site:** LA

**IDC:** 003

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

**Waste Contents Kg/Container**

<b><u>Waste Form</u></b>	<b><u>Minimum</u></b>	<b><u>Average</u></b>	<b><u>Maximum</u></b>
INORGANIC SOLIDS	8	9	10
SLUDGES/LIQUIDS	150	200	220

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** CEMENTED PROCESS RESIDUES

**SITE:** Los Alamos National Laboratory

**Generator:** LA

**Storage Site:** LA

**IDC:** 006

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		2.2	15
GLASS		0.9	
INORGANIC SOLIDS		160	
ORGANICS		4.06	
SLUDGES/LIQUIDS		88	

Information Only



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SUMMARY OF NON RADIONUCLIDE INVENTORY DATA  
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Information Only

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## Non Radionuclide Inventory Data

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Waste Form Description: COMBUSTIBLE WASTE

SITE: Mound

Generator: MD

Storage Site: ID

IDC : 827

Container Type: DRUM

Container Volume: 0.208 m3

### Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES	33	57	147
FILTERS		0.6	0.6
INORGANICS		2	3
METALS		0.05	0.05

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** NON-COMBUSTIBLE TRU WASTE

**SITE:** Mound

**Generator:** MD

**Storage Site:** ID

**IDC:** 824

**Container Type:** DRUM

**Container Volume:** 0.208 m3

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		1	1
GLASS		5	10
METALS	45	91	159

Information Only

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## Non Radionuclide Inventory Data

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Waste Form Description: SOIL

SITE: Mound

Generator: MD

Storage Site: ID

IDC: 842

Container Type: BOX

Container Volume: 4.205 m3

### Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		3	3
INORGANICS	1943	2398	2852
METALS		3	3
ORGANICS		0.1	1

Information Only

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SUMMARY OF NON RADIONUCLIDE INVENTORY DATA  
FOR OAK RIDGE NATIONAL LABORATORY

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Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLID WASTE - LABORATORY TYPE WASTE

**SITE:** Oak Ridge National Laboratory

**Generator:** OR

**Storage Site:** OR

**IDC:** 001

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		30	62
FILTERS		0.5	5
GLASS		10	125
METALS		20	340

Information Only

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SUMMARY OF NON RADIONUCLIDE INVENTORY DATA  
FOR ROCKY FLATS PLANT

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Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** GRAPHITE WASTE - MOLDS

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 300

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
GRAPHITE	8	67	87

Information Only

180



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## Non Radionuclide Inventory Data

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**Waste Form Description:** GRAPHITE WASTE - SCARFED CHUNKS

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC :** 303

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

**Waste Contents Kg/Container**

<u><b>Waste Form</b></u>	<u><b>Minimum</b></u>	<u><b>Average</b></u>	<u><b>Maximum</b></u>
GRAPHITE	8	67	87

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** COMBUSTIBLE WASTE - DRY      DRUM

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 831

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES	22	164	200
INORGANICS		0.6	1.5
ORGANICS		0.0023	1

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** COMBUSTIBLE WASTE - WET      DRUM

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 832

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

### Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES	6	164	200
INORGANICS		0.6	1.5
ORGANICS		0.0023	1

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** COMBUSTIBLE WASTE - PLASTICS DRUM

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 833

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES	18	164	200
INORGANICS		0.5	1
ORGANICS		0.0023	1

Information Only

184

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## Non Radionuclide Inventory Data

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**Waste Form Description:** METAL WASTE - LEAD

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 321

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
METALS	16	63	190

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** GLASS WASTE - RASCHIG RINGS DRUM

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 442

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
GLASS	25	200	220
INORGANICS		0.5	1

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLID INORGANIC WASTE - INSULATION

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 438

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES	0.25	1	2
GLASS	5	40	60
INORGANICS		0.5	1

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** PYROCHEMICAL SALT WASTE - SPENT SALT

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 429

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
ELEMENTS/COMPOUNDS	10	45	118
METALS	0.1	2.5	3

Information Only



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## Non Radionuclide Inventory Data

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**Waste Form Description:** PYROCHEMICAL SALT WASTE - DIRECT OXIDE REDUCTION

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 454

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

**Waste Contents Kg/Container**

<u><b>Waste Form</b></u>	<u><b>Minimum</b></u>	<u><b>Average</b></u>	<u><b>Maximum</b></u>
ELEMENTS/COMPOUNDS	10	45	118
METALS	1	2.5	3

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLIDIFIED AQUEOUS WASTE

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 800

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
INORGANIC SOLIDS	36	82	110
SLUDGES/LIQUIDS	36	83	110

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLIDIFIED AQUEOUS WASTE

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 803

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
INORGANIC SOLIDS	47	69	81
SLUDGES/LIQUIDS	47	69	81

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLIDIFIED AQUEOUS WASTE

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 807

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

**Waste Contents Kg/Container**

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
INORGANIC SOLIDS	36	82	110
SLUDGES/LIQUIDS	36	83	110

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLIDIFIED ORGANIC WASTE

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 801

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
INORGANIC SOLIDS	35	91	112
SLUDGES/LIQUIDS	38	101	124

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** SOLIDIFIED LABORATORY WASTE

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 802

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
INORGANIC SOLIDS	65	150	177
SLUDGES/LIQUIDS	43	100	118

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** CEMENTED INORGANIC PROCESS SOLIDS

**SITE:** Rocky Flats Plant

**Generator:** RF

**Storage Site:** ID

**IDC:** 806

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
INORGANIC SOLIDS	6	46	72
INORGANICS		28.7	150.5
ION EXCHANGE RESINS		7.3	100
SLUDGES/LIQUIDS	36	48	96

Information Only

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SUMMARY OF NON RADIONUCLIDE INVENTORY DATA  
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Information Only



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## Non Radionuclide Inventory Data

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**Waste Form Description:** MISCELLANEOUS SOLID WASTE

**SITE:** Richland Hanford

**Generator:** RH

**Storage Site:** RH

**IDC:** 001

**Container Type:** DRUM

**Container Volume:** 0.208 m<sup>3</sup>

Waste Contents Kg/Container

<u>Waste Form</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
COMBUSTIBLES		5	20
ELEMENTS/COMPOUNDS		0.001	0.005
GLASS		0.2	1
INORGANICS		10	20
METALS		24	50

Information Only

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## Non Radionuclide Inventory Data

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**Waste Form Description:** ABSORBED ORGANICS – COMPOSITE

**SITE:** Richland Hanford

**Generator:** RH

**Storage Site:** RH

**IDC:** 004

**Container Type:** DRUM

**Container Volume:** 0.208 m3

**Waste Contents Kg/Container**

<u><b>Waste Form</b></u>	<u><b>Minimum</b></u>	<u><b>Average</b></u>	<u><b>Maximum</b></u>
INORGANIC SOLIDS		5.6	
SLUDGES/LIQUIDS		10	

Information Only

**APPENDIX E**

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**Information Only**

**APPENDIX E  
WASTE STREAM PROFILES**

**Information Only**

## FOOTNOTES FOR THE WASTE STREAM PROFILES

1. Liquid waste streams are assumed to be solidified prior to sending to WIPP. A volume conversion of 2.5:1 is assumed for solidification.
2. WMCs 3000, 3900, 9100, and 9200 are placed in "solidified inorganic waste," "salt waste," or "solidified organic waste," depending on the information provided in the MWIR.
3. Particulate waste streams are assumed to be solidified prior to sending to WIPP. A volume conversion of 2.5:1 is assumed for solidifying particulate waste.
4. WMCs 6100 and 6190 are placed in "solidified organic waste," or "solidified inorganic waste," depending on the information provided in MWIR. Volume conversion is described in footnote 5.
5. Liquid lab pack waste is assumed to be solidified prior to sending to WIPP. It is assumed that the packing material in lab packs will be low-level waste when the liquid containers are removed. A volume conversion of 2.5:1 is assumed for solidification.
6. In error, mixed-residues were not reported in the MWIR for this waste stream (per verbal discussions with Rocky Flats Plant). Mixed residues were added as follows (GAO, 1992):
  - Incinerator Ash (IDCs 419, 420, 421, 425)
  - stored volume - 234 m<sup>3</sup>
  - projected volume - 0 m<sup>3</sup>
  - stored volume (to meet criticality and WIPP WAC requirements) - 1202 m<sup>3</sup>
7. WMCs 6200 and 6290 are placed in "solidified inorganic waste," "solidified inorganic waste," or "heterogeneous waste" if the waste stream must be solidified. They are placed in "unspecified metal waste," or "lead/cadmium metal waste" if they are primarily nonreactive metal contaminated with reactive metal. Reactive waste streams must be treated prior to shipment to WIPP.
8. Waste stream is assumed to be treated prior to shipment to WIPP. Volume change is dependent of the waste stream and treatment.
9. WMC 5000 is placed in "unspecified metal waste," "lead/cadmium metal waste," "inorganic nonmetal waste," "combustible waste," "graphite waste," "heterogeneous waste," or "filter waste," depending on the information in MWIR.
10. WMC 7000 and 9300 are placed in "unspecified metal waste" or "lead/cadmium metal waste," depending on the information in MWIR.
11. WMCs 7400, 7410, 7420, and 7490 are assumed to be drained of liquid and contain only metal waste.
12. These waste streams are excluded from disposal in WIPP at this time.
13. Adequate information is provided in MWIR to change the WMC from "unknown" to a more descriptive WMC. If there is not enough information in MWIR, these waste streams remain as "unknown" and are excluded from disposal in WIPP until characterized.

14. The TRU (non-mixed) volume and classification information were taken from the Phase I MWIR.
15. THESE ARE NOT ACTUAL SITE-GENERATED WASTE STREAMS. The TRU (non-mixed) volume was calculated from the difference between the 1993 IDB and the MWIR (Phase II). These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major TRU mixed streams.
16. The amount of steel in the container represents the drum only. The amount of metal in the disposal canister and plug is provided in the Section 5.
17. IDC was changed/assigned for the purposes of this report per the methodology described in Appendix J.
18. The Waste Matrix Code Grouping and/or IDC were assigned based on the distribution of the TRU-Mixed Waste from this site.
19. WMC was changed to be consistent with similar waste streams.
20. This TRU waste stream is classified as "unknown" because there was not adequate information available at the time of publication of this report to classify the waste stream. It is anticipated that characterization information can be generated by the site.
21. Insufficient information is available to determine the appropriate TRUCON code.
22. Insufficient information is available to determine the appropriate NMVP code.
23. Insufficient information is available to determine the Part B category.
24. This waste stream includes residues. The volume of the residue portion of this waste stream is consistent with the volumes reported by Rocky Flats Plant in their "ship as waste" residue scenarios, repackaged/processed to meet criticality and WIPP WAC requirements only (GAO, 1992).
25. The site IDC is not listed in TRUCON. The TRUCON and NMVP codes were assigned based on the TRUCON codes provided in the MWIR (Phase II).
26. There is not adequate information in MWIR to define this waste stream. It will remain in the "unknown" category and will be excluded from disposal in WIPP until characterized.
27. Part B codes are not applicable for non-mixed waste.

# WASTE STREAM PROFILES

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	AE-T01	HANDLING	CH	FIELD OFFICE	Chicago
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable		
- Group	Solidified Inorganic Waste	TRUCON	Information Incomplete		

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	17
Projected	142
Total	160

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	461.54	418.27	370.19
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes:

203

29-Jun-94

DATABASE WS ID	AE-T02	HANDLING/RH	FIELD OFFICE	Chicago
WS NAME	NON MIXED TRU DERIVED FROM IDB			
NO MIGRATION VARIANCE PETITION	Information Incomplete			
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable	
- Group	Unspecified Metal Waste	TRUCON	Information Incomplete	

**IDC's**

Site	Not Reported
Assigned	RF-321

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	48
Total	48

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
Organics	Celulosics			
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27



29-Jun-94

DATABASE WS ID	AE-T03	HANDLING	CH	FIELD OFFICE	Chicago
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable		
- Group	Unspecified Metal Waste	TRUCON	Information Incomplete		

**IDC's**  
 Site Not Reported  
 Assigned RF-321

**WASTE VOLUMES (cu. m.)**

Retrievable	4
Projected	36
Total	40

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
Organics	Celulosics			
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	AE-W038	HANDLING	CH	FIELD OFFICE	Chicago
WS NAME	MTRU Acidic Wastewater				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	6120	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**DC's**

Site: Not Reported

Assigned: AE-131

**WASTE VOLUMES (cu. m.)**

Retrievable	3
Projected	2
Total	5

**EPA CODE(s)**

D004A
D002B
D006A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	461.54	418.27	370.19
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 5, 8, 16, 17, 21, 22, 23

Information Only

29-Jun-94

DATABASE WS ID	AE-W039	HANDLING	CH	FIELD OFFICE	Chicago
WS NAME	MTRU Organic Resins				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3212	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Organic Waste		TRUCON	Information Incomplete

RC's

Site Not Reported

Assigned RF-806.1

WASTE VOLUMES (cu. m.)

Retrievable	0
Projected	0
Total	0

EPA CODE(s)

D006A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics			
Organics	Celulosics			
	Rubber			
Solidified	Plastics			
	Organic Matrix	2012.02	625.00	164.90
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 3, 8, 16, 17, 21, 22, 23

Information Only

307

29-Jun-94

<b>DATABASE WS ID</b>	AE-W040	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Chicago
<b>WS NAME</b>	MTRU Evaporator Concentrator Sludges				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	3121	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Solidified Inorganic Waste		<b>TRUCON</b>	Information Incomplete

**IPC's**

Site: Not Reported

Assigned: RF-800

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

D009A
D007A
D006A

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

**WASTE STREAM PROFILES**

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

<b>DATABASE WS ID</b>	AE-W041	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Chicago
<b>WS NAME</b>	MTRU Elemental Lead				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	7210	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Lead/Cadmium Metal Waste	<b>TRUCON</b>	Information Incomplete		

**DC's**

<b>Site</b>	Not Reported
<b>Assigned</b>	RF-321

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	1
Total	1

**EPA CODE(s)**

D008C
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<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**Footnotes:** 16, 17, 21, 22, 23

Information Only

29-Jun-94

DATABASE WS ID	AE-W042	HANDLING	CH	FIELD OFFICE	Chicago
WS NAME	MTRU Cadmium Waste				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5130	WIPP PART B APPLICATION	Information Incomplete		
- Group	Lead/Cadmium Metal Waste	TRUCON	Information Incomplete		

IDC's  
 Site: Not Reported  
 Assigned: RF-480

WASTE VOLUMES (cu. m.)

Retrievable	0
Projected	0
Total	0

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	Organics	Celulosics	45.27	7.43
Rubber				
Plastics		67.57	15.09	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

29-Jun-94

DATABASE WS ID	AL-W005	HANDLING	CH	FIELD OFFICE	Chicago
WS NAME	MIXED TRANSURANICS/URANIUM IN GLOVEBOX				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	1000	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

IDC's

Site Glovebox

Assigned RF-800

WASTE VOLUMES (cu. m.)

Retrievable	0
Projected	0
Total	0

EPA CODE(s)

D006A
D007A
D002B
D004A
D011A
D008A
D010A
D005A

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics	Celulosics		
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 2, 8, 16, 17, 21, 22, 23

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	AW-W016	HANDLING	RH	FIELD OFFICE	Chicago
WS NAME	ELECTROREFINER STRIPPER CADMIUM				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3190	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Lead/Cadmium Metal Waste		TRUCON	Information Incomplete

**IDC's**

Site	CH-ANL-245T
Assigned	RF-480

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	1
<b>Total</b>	<b>1</b>

**EPA CODE(s)**

D006A
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WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
<b>Organics</b>	Celulosics	45.27	7.43	0.00
	Rubber			
<b>Solidified</b>	Plastics	67.57	15.09	0.00
	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 19, 21, 22, 23



29-Jun-94

<b>DATABASE WS ID</b>	AW-W018	<b>HANDLING</b>	RH	<b>FIELD OFFICE</b>	Chicago
<b>WS NAME</b>	SODIUM - TRU				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	6200	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Unspecified Metal Waste		<b>TRUCON</b>	Information Incomplete	

**IDC's**

Site CH-ANL-180T

Assigned RF-480

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

D003D
D001C

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	<b>Organics</b>	Celulosics	45.27	7.43
Rubber				
Plastics		67.57	15.09	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 7, 16, 17, 21, 22, 23

29-Jun-94

DATABASE WS ID	AW-W019	HANDLING	RH	FIELD OFFICE	Chicago
WS NAME	SODIUM POTASSIUM - NAK - TRU				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	6200	WIPP PART B APPLICATION	Information Incomplete		
- Group	Unspecified Metal Waste	TRUCON	Information Incomplete		

Site **DC's** CH-ANL-182T  
Assigned RF-480

WASTE VOLUMES (cu. m.)

Retrievable	0
Projected	0
Total	0

EPA CODE(s)

D003D
D001C

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	Organics	Celulosics	45.27	7.43
Rubber				
Plastics		67.57	15.09	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 7, 16, 17, 21, 22, 23

29-Jun-94

DATABASE WS ID	AW-W020	HANDLING	RH	FIELD OFFICE	Chicago
WS NAME	TRU-CD-HOT CELL WASTE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5400	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste		TRUCON	Information Incomplete	

IDC's

Site CH-ANL-241T

Assigned OR-001

WASTE VOLUMES (cu. m.)

Retrievable	0
Projected	0
Total	0

EPA CODE(s)

D006A

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	Organics	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
Solidified	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22, 23

Information Only

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	AW-W021	HANDLING	IRH	FIELD OFFICE	Chicago
WS NAME	ELEMENT HARDWARE FCF WASTE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5100	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Unspecified Metal Waste		TRUCON	Information Incomplete

IDC's  
 Site CH-ANL-243T  
 Assigned RF-480

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	1
Total	1

**EPA CODE(s)**

D006A
D005A

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	<b>Organics</b>	Celulosics	45.27	7.43
Rubber				
Plastics		67.57	15.09	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22, 23

Information Only

29-Jun-94

DATABASE WS ID	AW-W022	HANDLING	RH	FIELD OFFICE	Chicago
WS NAME	ELECTROREFINER INSOLUBLES W/CADMIUM				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3150	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**IDC's**

Site	CH-ANL-246T
Assigned	RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

D006A

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

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# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	AW-W024	HANDLING	RH	FIELD OFFICE	Chicago
WS NAME	SPENT HEPA FILTERS AND PRE-FILTERS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5410	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Filter Waste	TRUCON	Information Incomplete	

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	7
Projected	0
Total	8

**EPA CODE(s)**

- D008A
- D007A
- D006A

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	429.82	429.82	0.00
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics	8.77	8.77	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes:

Information Only

# WASTE STREAM PROFILES

CAO-94-1005, Rev. 0  
(CONTINUED) June 1994

29-Jun-94

DATABASE WS ID	BC-T01	HANDLING	RH	FIELD OFFICE	Chicago
WS NAME	NON MIXED TRU				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	WIPP PART B APPLICATION		Not Applicable	
	- Group	Unknown Waste		TRUCON	Information Incomplete

**IDC's**

Site	Not Reported
Assigned	UNK

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	368
Total	368

<u>WASTE PARAMETERS (kg/m3)</u>		<u>Max</u>	<u>Avg</u>	<u>Min</u>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 20, 21, 22, 27

209

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	BE-T01	HANDLING	CH	FIELD OFFICE	Naval Reacto
WS NAME	NON MIXED TRU				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	WIPP PART B APPLICATION		Not Applicable	
	- Group	Unknown Waste		TRUCON	Information Incomplete

**IDC's**

Site	Not Reported
Assigned	UNK

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	237
Total	237

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 20, 21, 22, 27

## Information Only



29-Jun-94

DATABASE WS ID	BE-T02	HANDLING	RH	FIELD OFFICE	Naval Reacto
WS NAME	NON MIXED TRU				
NO MIGRATION VARIANCE PETITION	Information incomplete				
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable		
- Group	Unknown Waste	TRUCON	Information incomplete		

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	7
Total	7

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes:

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	ET-T01	HANDLING	CH	FIELD OFFICE	Oakland
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	WIPP PART B APPLICATION		Not Applicable	
	- Group	Lead/Cadmium Metal Waste		TRUCON	Information Incomplete

**IDC's**  
 Site: Not Reported  
 Assigned: RF-321

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	0
Total	3

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
<b>Solidified</b>	Plastics			
	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

29-Jun-94

DATABASE WS ID	ET-W002	HANDLING	CH	FIELD OFFICE	Oakland
WS NAME	TRU LEAD SHIELDING (ONE BRICK)				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	7200	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Lead/Cadmium Metal Waste	TRUCON	Information Incomplete	

**DC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes:

29-Jun-94

DATABASE WS ID	IN-W112	HANDLING	RH	FIELD OFFICE	Idaho
WS NAME	HEPA FILTERS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5410	WIPP PART B APPLICATION	FILTERS (UNSPECIFIED)		
- Group	Filter Waste	TRUCON	Information Incomplete		

IDC's  
Site ID-WIN-172  
Assigned RF-490

WASTE VOLUMES (cu. m)

Retrievable	20
Projected	204
Total	224

EPA CODE(s)

- F005A
- F005A
- P027
- P024
- P022
- P012
- P005
- F005B
- F005A
- F002
- F005A
- D009F
- F005A
- P028
- F002
- F002
- P030
- F002
- F002
- F002
- F002
- F002
- F001
- F001
- F005A
- D039
- D026
- D028
- D032
- D034
- D035
- D036
- D038
- F001
- D040

WASTE PARAMETERS (kg/m<sup>3</sup>)

		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	429.82	429.82	0.00
Organics	Celulosics			
	Rubber			
Solidified	Plastics	8.77	8.77	0.00
	Organic Matrix			
Soils	Inorganic Matrix			
	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

- F001
- D007B
- F001
- D021
- D019
- D018
- D011B
- D010B
- F001
- D008D
- D006C
- D005B
- D004B
- F002
- D022

Footnotes: 16, 17, 21, 22

29-Jun-94

DATABASE WS ID	IN-W139	HANDLING	RH	FIELD OFFICE	Idaho
WS NAME	TRANSURANIC CONTAMINATED LEAD DEBRIS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5000	WIPP PART B APPLICATION	METAL (UNSPECIFIED)		
- Group	Heterogeneous Waste		TRUCON	Information Incomplete	

IDC's  
 Site   
 Assigned

WASTE VOLUMES (cu. m.)

Retrievable	5
Projected	0
Total	5

EPA CODE(s)

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	Organics	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
Solidified	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
Soils	Soil			
	Packaging Materials	Steel	141.83	
		Plastic	39.42	

Footnotes:

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W146	HANDLING	RH	FIELD OFFICE	Idaho
WS NAME	TRU HEAVY METAL SLUDGE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3129	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**IDC's**

Site	Not Reported
Assigned	RF-800

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	0
Total	2

**EPA CODE(s)**

D006A
D011A
D009A
D008A
D007A

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16,17, 21, 22

Information Only

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W157	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	CEMENTED SLUDGES (TRU): SPECIAL SETUPS (CEMENT)				
NO MIGRATION VARIANCE PETITION	ID 213				
WASTE MATRIX CODE - Site	3150	WIPP PART B APPLICATION	SOLIDIFIED LIQUID		
- Group	Solidified Organic Waste		TRUCON ID 213		

**IDC's**

Site ID-EGG-112T-004

Assigned RF-801

**WASTE VOLUMES (cu. m.)**

Retrievable	227
Projected	0
Total	227

**EPA CODE(s)**

F001
D002B
D008A
F001
F001
F002
F003
F003
D008A
F003
F001

**WASTE PARAMETERS (kg/m3)      Max      Avg      Min**

<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	1134.62	923.08	350.96
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W159	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNCEMENTED INORGANIC SLUDGE (TRU): EVAPORATOR AND DISSOLVER SLUDGE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3150	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

	<b>IDC's</b>
Site	ID-EGG-102T-811
Assigned	RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

**EPA CODE(s)**

P015
D001C
D009A
D009D

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>	
<b>Inorganics</b>	Iron-Based Metals/Alloys				
	Aluminum-Based Metals/Alloys				
	Other Metals				
	Other Materials				
	<b>Organics</b>	Celulosics			
		Rubber			
<b>Solidified</b>	Plastics				
	Organic Matrix				
	Inorganic Matrix	2012.02	625.00	164.90	
<b>Soils</b>	Soil				
<b>Packaging Materials</b>	Steel		141.83		
	Plastic		39.42		

Footnotes: 16,17, 21, 22

## Information Only



# WASTE STREAM PROFILES

CAO-94-1005, Rev. 0  
(CONTINUED) June 1994

29-Jun-94

DATABASE WS ID	IN-W161	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	CONCRETE-BRICK (TRU): FIREBRICK				
NO MIGRATION VARIANCE PETITION	ID 122				
WASTE MATRIX CODE - Site	5230	WIPP PART B APPLICATION	FIREBRICK AND CERAMIC CRUCIB		
- Group	Inorganic Non-metal Waste		TRUCON ID 222		

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	111
Projected	0
<b>Total</b>	<b>111</b>

**EPA CODE(s)**

F001
F001
F002

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	572.12	572.12	0.00
<b>Organics</b>	Celulosics	24.04	24.04	0.00
	Rubber			
<b>Solidified</b>	Plastics	24.04	24.04	0.00
	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes:

Information Only

0229

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W163	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	CONCRETE-BRICK (TRU): OIL-DRI RESIDUE FROM INCINERATOR				
NO MIGRATION VARIANCE PETITION	ID 122				
WASTE MATRIX CODE - Site	3119	WIPP PART B APPLICATION	FIREBRICK AND CERAMIC CRUCIB		
- Group	Heterogeneous Waste		TRUCON ID 122		

**IDC's**

Site ID-EGG-115T-375

Assigned RF-375

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

**EPA CODE(s)**

F002
F001
F001
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	4.81	4.81	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	961.54	557.69	216.35
<b>Organics</b>	Celulosics			
	Rubber			
<b>Solidified</b>	Plastics	38.46	38.46	0.00
	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
	Packaging Materials			
	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 9

Information Only

220

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W164	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	CEMENTED SLUDGES (TRU): ORGANIC AND SLUDGE IMMOBILIZATION SYSTEM WASTE				
NO MIGRATION VARIANCE PETITION	ID 122				
WASTE MATRIX CODE	- Site	3150	WIPP PART B APPLICATION	ORGANIC LIQUID/SLUDGE	
	- Group	Solidified Organic Waste		TRUCON ID 112	

**IDC's**

Site ID-EGG-112T-700

Assigned RF-801

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	0
Total	2

**EPA CODE(s)**

F001
F001
F001
F003
D022

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	1134.62	923.08	350.96
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 19

Information Only

031

29-Jun-94

DATABASE WS ID	IN-W166	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	CEMENTED SLUDGES (TRU): SOLID INORGANIC PROCESS SOLUTION				
NO MIGRATION VARIANCE PETITION	ID 114 (3)				
WASTE MATRIX CODE - Site	3150	WIPP PART B APPLICATION	INORGANIC PROCESS SOLIDS AN		
- Group	Solidified Inorganic Waste		TRUCON ID 114 (3)		

**IDC's**

Site ID-EGG-112T-114

Assigned RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	71
Projected	0
Total	71

**EPA CODE(s)**

F001
F003
F001
F001
F002
F003
F003
D008A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics			
Solidified	Celulosics			
	Rubber			
	Plastics			
Soils	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
Packaging Materials	Soil			
	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 25

# WASTE STREAM PROFILES

CAO-94-1005, Rev. 0  
(CONTINUED) June 1994

29-Jun-94

DATABASE WS ID	IN-W167	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	CEMENTED SLUDGES (TRU): SOLID ORGANICS				
NO MIGRATION VARIANCE PETITION	ID 112 (3)				
WASTE MATRIX CODE	- Site	3150	WIPP PART B APPLICATION	ORGANIC LIQUID/SLUDGE (UNSPE	
	- Group	Solidified Organic Waste		TRUCON/ID 112 (3)	

**IDC's**

Site	ID-EGG-112T-112
Assigned	RF-801

**WASTE VOLUMES (cu. m.)**

Retrievable	164
Projected	0
<b>Total</b>	<b>164</b>

**EPA CODE(s)**

F001
D022
F001
F001
F003

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	1134.62	923.08	350.96
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 19, 25

25

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W169	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	COMBUSTIBLES (TRU): DRY PAPER AND RAGS				
NO MIGRATION VARIANCE PETITION	ID 216				
WASTE MATRIX CODE - Site	5440	WIPP PART B APPLICATION	COMBUSTIBLES		
- Group	Heterogeneous Waste		TRUCON ID 216		

**IDC's**

Site	ID-EGG-114T-330
Assigned	RF-831

**WASTE VOLUMES (cu. m.)**

Retrievable	5775
Projected	0
<b>Total</b>	<b>5775</b>

**EPA CODE(s)**

F001
D008A
D008C
D022
D029
F001
F001
F003
F001
F003
F001
F005
F005A
F002

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	4.23	1.10	0.00
	<b>Organics</b>			
	Celulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>			
	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17

## Information Only

29-Jun-94

DATABASE WS ID	IN-W170	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	COMBUSTIBLES (TRU): DECONTAMINATION/DECOMMISSIONING WASTE COMBUSTIBLE SOLIDS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5440	WIPP PART B APPLICATION	COMBUSTIBLES	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

IDC's

Site ID-EGG-114T-120

Assigned AE-120

WASTE VOLUMES (cu. m.)

Retrievable	0
Projected	0
Total	0

EPA CODE(s)

D008A
D006A
F003
D004A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	63.16	36.84	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	10.53	2.63	0.00
	Organics	Celulosics	450.95	213.16
Rubber		7.16	2.37	0.00
Plastics		57.26	21.32	1.58
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 21, 22

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W171	HANDLING/CH	FIELD OFFICE Idaho
WS NAME	COMBUSTIBLES (TRU): RESEARCH GENERATED WASTE COMPACTIBLE AND COMBUSTIBLE SOLIDS		
NO MIGRATION VARIANCE PETITION	Information Incomplete		
WASTE MATRIX CODE - Site	5440	WIPP PART B APPLICATION	COMBUSTIBLES
- Group	Heterogeneous Waste	TRUCON	Information Incomplete

**DC's**

Site ID-EGG-114T-110

Assigned AE-110

**WASTE VOLUMES (cu. m.)**

Retrievable	4
Projected	0
<b>Total</b>	<b>4</b>

**EPA CODE(s)**

F003
D008A
D006A
D004A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	14.42	4.81	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	19.23	4.81	0.00
<b>Organics</b>	Celulosics	458.65	287.69	43.27
	Rubber	8.65	3.27	0.00
	Plastics	60.58	35.96	1.44
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 21, 22

Information Only



29-Jun-94

DATABASE WS ID	IN-W172	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	COMBUSTIBLES (TRU): COMBUSTIBLES				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5440	WIPP PART B APPLICATION	COMBUSTIBLES		
- Group	Heterogeneous Waste		TRUCON	Information Incomplete	

IDC's

Site ID-EGG-114T-010

Assigned RF-831

WASTE VOLUMES (cu. m.)

Retrievable	166
Projected	0
Total	166

EPA CODE(s)

F002
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	4.23	1.10	0.00
Organics	Celulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W174	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	CEMENTED SLUDGES (TRU): HIGH LEVEL ACID				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3113	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**IDC's**  
 Site: ID-EGG-112T-834  
 Assigned: MD-836

**WASTE VOLUMES (cu. m.)**

Retrievable	151
Projected	0
<b>Total</b>	<b>151</b>

**EPA CODE(s)**

D002A
D001C

<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	630.29	630.29	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

Information Only

**WASTE STREAM PROFILES (CONTINUED)**

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

<b>DATABASE WS ID</b>	IN-W177	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	CEMENTED SLUDGES (TRU): HIGH LEVEL CAUSTIC				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	3150	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**IDC's**

Site ID-EGG-112T-835

Assigned MD-836

**WASTE VOLUMES (cu. m.)**

Retrievable	176
Projected	0
Total	176

**EPA CODE(s)**

D002B

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>	
<b>Inorganics</b>	Iron-Based Metals/Alloys				
	Aluminum-Based Metals/Alloys				
	Other Metals				
	Other Materials				
	<b>Organics</b>	Celulosics			
		Rubber			
<b>Solidified</b>	Plastics				
	Organic Matrix				
	Inorganic Matrix	630.29	630.29	0.00	
<b>Soils</b>	Soil				
<b>Packaging Materials</b>	Steel		141.83		
	Plastic		39.42		

Footnotes: 16, 17, 21, 22, 23

Information Only

29-Jun-94

DATABASE WS ID	IN-W179	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	CEMENTED SLUDGES (TRU): HIGH LEVEL SLUDGE/CEMENT				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3150	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

IDC's  
 Site ID-EGG-112T-836  
 Assigned MD-836

WASTE VOLUMES (cu. m.)

Retrievable	6
Projected	0
Total	6

EPA CODE(s)

F001
D002B
D006A
D007A
D008A
D009A
D010A
D011A
F001
F003
F003
P015
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics	Celulosics		
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix	630.29	630.29	0.00
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 21, 22, 23

# WASTE STREAM PROFILES

CAO-94-1005, Rev. 0  
(CONTINUED) June 1994

29-Jun-94

DATABASE WS ID	IN-W181	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	CEMENTED SLUDGES (TRU): LAUNDRY SLUDGE				
NO MIGRATION VARIANCE PETITION	ID 211				
WASTE MATRIX CODE	- Site	3150	WIPP PART B APPLICATION	INORGANIC WASTE WATER	
	- Group	Solidified Inorganic Waste		TRUCON	ID 211

**IDC's**

Site **ID-EGG-112T-978**

Assigned **RF-807**

**WASTE VOLUMES (cu. m.)**

Retrievable	10
Projected	0
<b>Total</b>	<b>10</b>

**EPA CODE(s)**

F001
D002B
D006A
D007A
D008A
D009A
P015
F001
F003
F001
F002
F003
F003
F001
F001

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17

Information Only

30

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W186	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	COMBUSTIBLES (TRU): COMBUSTIBLE WASTE				
NO MIGRATION VARIANCE PETITION	ID 116 (3)				
WASTE MATRIX CODE - Site	5440	WIPP PART B APPLICATION	COMBUSTIBLES		
- Group	Heterogeneous Waste		TRUCON ID 116 (3)		

**IDC's**

Site	ID-EGG-114T-116
Assigned	RF-831

**WASTE VOLUMES (cu. m.)**

Retrievable	2695
Projected	0
<b>Total</b>	<b>2695</b>

**EPA CODE(s)**

F001
F001
D008A
F002
F001
F001

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	4.23	1.10	0.00
	<b>Organics</b>			
	Celulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 25

Information Only

29-Jun-94

DATABASE WS ID	IN-W187	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNCEMENTED INORGANIC SLUDGE (TRU): EQUIPMENT				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5000	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste		TRUCON	Information Incomplete	

**IDC's**  
 Site ID-EGG-102T-980  
 Assigned OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

F002
F001
F001
F001
D008A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	Organics	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
Solidified	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 9, 16, 17, 21, 22, 23

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W188	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	CEMENTED SLUDGES (TRU): BUILDING 776 PROCESS SLUDGE				
NO MIGRATION VARIANCE PETITION	ID 211				
WASTE MATRIX CODE	- Site	3150	WIPP PART B APPLICATION	INORGANIC WASTE WATER TREA	
	- Group	Solidified Organic Waste		TRUCON	ID 211

**IDC's**

Site ID-EGG-112T-976

Assigned RF-801

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

**EPA CODE(s)**

F001
F001
F001
F002
F003
F003
F003
P015
D002B
F001
D028
D022
D009A
D008A
D007A
D006A
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	1134.62	923.08	350.96
	Inorganic Matrix			
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>	Steel	141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 19

Information Only



# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W189	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	BENELEX, PLEXIGLASS (TRU): BENELEX AND PLEXIGLASS				
NO MIGRATION VARIANCE PETITION	ID 221				
WASTE MATRIX CODE - Site	5440	WIPP PART B APPLICATION	BENELEX AND PLEXIGLAS		
- Group	Heterogeneous Waste		TRUCON	ID 221	

**IDC's**

Site ID-EGG-109T-464

Assigned RF-302

**WASTE VOLUMES (cu. m.)**

Retrievable	6
Projected	0
Total	6

**EPA CODE(s)**

D008C
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1.92	1.92	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals	7.69	7.69	0.00
	Other Materials	86.54	86.54	0.00
<b>Organics</b>	Celulosics	40.38	40.38	0.00
	Rubber			
	Plastics	296.15	296.15	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17

Information Only

315

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W197	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	COMBUSTIBLES (TRU): MOIST PAPER AND RAGS				
NO MIGRATION VARIANCE PETITION	ID 216				
WASTE MATRIX CODE - Site	5440	WIPP PART B APPLICATION	COMBUSTIBLES		
- Group	Heterogeneous Waste		TRUCON ID 216		

**IDC's**

Site	ID-EGG-114T-336
Assigned	RF-832

**WASTE VOLUMES (cu. m.)**

Retrievable	778
Projected	0
<b>Total</b>	<b>778</b>

**EPA CODE(s)**

F001
D008A
D002B
D008C
F001
F001
F001
F002
F003
F003
D022
F005A
D001C
F001

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	3.53	0.60	0.00
	<b>Organics</b>			
	Celulosics	475.08	115.58	0.00
	Rubber	40.38	16.75	0.00
	Plastics	71.26	35.18	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W198	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	COMBUSTIBLES (TRU): PLASTICS, TEFLON, WASH AND PVC				
NO MIGRATION VARIANCE PETITION	ID 216				
WASTE MATRIX CODE - Site	5310	WIPP PART B APPLICATION	COMBUSTIBLES		
- Group	Combustible Waste		TRUCON	ID 216	

**Site** ID-EGG-114T-337

**Assigned** RF-833

**WASTE VOLUMES (cu. m.)**

Retrievable	170
Projected	0
<b>Total</b>	<b>170</b>

**EPA CODE(s)**

D008C
F005A
F005A
F003
F003
F001
F002
F003
D008A
F001
F001
F001
D029
D022
F001
F003

**WASTE PARAMETERS (kg/m<sup>3</sup>)**

		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	0.85	0.44	0.00
	<b>Organics</b>	Celulosics	1.70	0.14
	Rubber	42.51	13.93	0.00
	Plastics	510.09	122.52	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

M I N I M A R Y

Footnotes: 16

Information Only

2/7

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W199	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	COMBUSTIBLES (TRU): WASHABLES, RUBBER, PLASTICS				
NO MIGRATION VARIANCE PETITION	ID NYD				
WASTE MATRIX CODE	- Site	5440	WIPP PART B APPLICATION	COMBUSTIBLES ((UNSPECIFIED))	
	- Group	Heterogeneous Waste	TRUCON	Information Incomplete	

IDC's  
 Site ID-EGG-114T-460  
 Assigned RF-833

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
<b>Total</b>	<b>1</b>

**EPA CODE(s)**

F001
F001
F001
F002

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	0.85	0.44	0.00
<b>Organics</b>	Celulosics	1.70	0.14	0.00
	Rubber	42.51	13.93	0.00
	Plastics	510.09	122.52	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>	Steel	141.83	
		Plastic	39.42	

Footnotes: 16, 17, 21

Information Only

# WASTE STREAM PROFILES

CAO-94-1005, Rev. 0  
(CONTINUED) June 1994

29-Jun-94

DATABASE WS ID	IN-W202	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	COMBUSTIBLES (TRU): WOOD				
NO MIGRATION VARIANCE PETITION	ID 216				
WASTE MATRIX CODE - Site	5320	WIPP PART B APPLICATION	COMBUSTIBLES		
- Group	Combustible Waste		TRUCON ID 216		

**IDC's**

Site ID-EGG-114T-970

Assigned RF-831

**WASTE VOLUMES (cu. m.)**

Retrievable	110
Projected	0
<b>Total</b>	<b>110</b>

**EPA CODE(s)**

F001
F001
D008A
F001
F003
F002
F001

**WASTE PARAMETERS (kg/m3)**

	Max	Avg	Min
<b>Inorganics</b>			
Iron-Based Metals/Alloys			
Aluminum-Based Metals/Alloys			
Other Metals			
Other Materials	4.23	1.10	0.00
<b>Organics</b>			
Celulosics	576.85	115.83	0.00
Rubber	47.84	11.11	0.00
Plastics	84.42	33.32	0.00
<b>Solidified</b>			
Organic Matrix			
Inorganic Matrix			
<b>Soils</b>			
Soil			
<b>Packaging Materials</b>			
Steel		141.83	
Plastic		39.42	

Footnotes: 16, 17

Information Only

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W203	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	COMBUSTIBLES (TRU): COMBUSTIBLE EQUIPMENT BOXES OR FLOOR SWEEPING AND RUST				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5440	WIPP PART B APPLICATION	COMBUSTIBLES (UNSPECIFIED)	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

**IDC's**

Site ID-EGG-114T-826

Assigned MD-827

**WASTE VOLUMES (cu. m.)**

Retrievable	80
Projected	0
<b>Total</b>	<b>80</b>

**EPA CODE(s)**

D009D
D009A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	0.32	0.24	0.00
	Other Materials	17.31	17.31	0.00
	<b>Organics</b>	Celulosics	918.75	63.03
Rubber		212.02	19.18	0.00
Plastics		1060.10	191.83	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>			
	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22

Information Only

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W204	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	COMBUSTIBLES (TRU): COMBUSTIBLE EQUIPMENT DRUMS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5440	WIPP PART B APPLICATION	COMBUSTIBLES (UNSPECIFIED)		
- Group	Heterogeneous Waste		TRUCON	Information Incomplete	

**DC's**

Site: ID-EGG-114T-827

Assigned: MD-827

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	0
<b>Total</b>	<b>2</b>

**EPA CODE(S)**

DO09A
DO09D
DO08A

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	0.32	0.24	0.00
	Other Materials	17.31	17.31	0.00
	<b>Organics</b>	Celulosics	918.75	63.03
Rubber		212.02	19.18	0.00
Plastics		1060.10	191.83	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 21, 22

Information Only

257

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W205	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	COMBUSTIBLES (TRU): LOW SPECIFIC ACTIVITY PLASTICS, PAPER ETC.				
NO MIGRATION VARIANCE PETITION	ID 216				
WASTE MATRIX CODE - Site	5300	WIPP PART B APPLICATION	COMBUSTIBLES		
- Group	Combustible Waste		TRUCON ID 216		

**IDC's**

Site	ID-EGG-114T-900
Assigned	RF-833

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
<b>Total</b>	<b>1</b>

**EPA CODE(s)**

F001
F001
F001
F001
F002
F003
D008A

**WASTE PARAMETERS (kg/m3)**

	Max	Avg	Min
<b>Inorganics</b>			
Iron-Based Metals/Alloys			
Aluminum-Based Metals/Alloys			
Other Metals			
Other Materials	0.85	0.44	0.00
<b>Organics</b>			
Celulosics	1.70	0.14	0.00
Rubber	42.51	13.93	0.00
Plastics	510.09	122.52	0.00
<b>Solidified</b>			
Organic Matrix			
Inorganic Matrix			
<b>Soils</b>			
Soil			
<b>Packaging Materials</b>			
Steel		141.83	
Plastic		39.42	

Footnotes: 16, 17

Information Only



29-Jun-94

DATABASE WS ID	IN-W206	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	FILTERS (TRU): CERTIFIED TRU HEPA FILTER WASTE				
NO MIGRATION VARIANCE PETITION	ID 119 (3)				
WASTE MATRIX CODE - Site	5410	WIPP PART B APPLICATION	FILTERS (UNSPECIFIED)		
- Group	Filter Waste	TRUCON	ID 119 (3)		

IDC's

Site ID-EGG-118T-119

Assigned RF-490

WASTE VOLUMES (cu. m.)

Retrievable	383
Projected	0
Total	383

EPA CODE(s)

F001
D001C
F001
F002
F001
D002B

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	429.82	429.82	0.00
Organics	Celulosics			
	Rubber			
Solidified	Plastics	8.77	8.77	0.00
	Organic Matrix			
Soils	Inorganic Matrix			
	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 25

Information Only

253

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W207	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	FILTERS (TRU): FULFLO INCINERATOR FILTERS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5410	WIPP PART B APPLICATION	FILTERS (UNSPECIFIED)	
	- Group	Filter Waste	TRUCON	Information Incomplete	

**IDC's**

Site ID-EGG-118T-328

Assigned RF-335

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

**EPA CODE(s)**

F002
F001
F001
F001
D002B

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	500.00	168.27	48.08
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>			
	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W214	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	FILTERS (TRU): GLASS FILTERS AND FIBERGLASS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5410	WIPP PART B APPLICATION	Information Incomplete		
- Group	Filter Waste	TRUCON	Information Incomplete		

IDC's  
 Site: ID-EGG-118T-813  
 Assigned: RF-438

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

**EPA CODE(s)**

D001C
D009D
D009A
D002B

**WASTE PARAMETERS (kg/m3)**

		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	293.27	194.71	24.04
	<b>Organics</b>			
	Celulosics	9.62	4.81	1.20
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

Information Only

225

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W216	HANDLING/CH	FIELD OFFICE
WS NAME	UNCEMENTED INORGANIC SLUDGE (TRU): FIRST STAGE SLUDGE		
NO MIGRATION VARIANCE PETITION	ID 211		
WASTE MATRIX CODE - Site	3150	WIPP PART B APPLICATION	INORGANIC WASTE WATER TREA
- Group	Solidified Inorganic Waste	TRUCON	ID 211

Site **IDC's**  
 ID-EGG-102T-001  
 Assigned RF-800

**WASTE VOLUMES (cu. m.)**

Retrievable	2531
Projected	0
<b>Total</b>	<b>2531</b>

**EPA CODE(s)**

D002B
P015
F003
F003
F003
F002
F001
F001
F001
F001
F001
D022
D011A
D009A
D008A
D007A
D006A
D005A
D028
F001

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17

Information Only

29-Jun-94

DATABASE WS ID	IN-W218	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNCEMENTED INORGANIC SLUDGE (TRU): BLDG 374 DRY SLUDGE				
NO MIGRATION VARIANCE PETITION	ID 211				
WASTE MATRIX CODE - Site	3150	WIPP PART B APPLICATION	INORGANIC WASTE WATER TREA		
- Group	Solidified Inorganic Waste		TRUCON	ID 211	

**IDC's**  
 Site ID-EGG-102T-007  
 Assigned RF-803

**WASTE VOLUMES (cu. m.)**

Retrievable	459
Projected	0
Total	459

**EPA CODE(s)**

F003
F001
F001
F002
F001
F003
F003
F005A
F001
F001
D028
D009A
D008A
D007A
D006A
D002B
P015
D022

**WASTE PARAMETERS (kg/m<sup>3</sup>)**      Max      Avg      Min

<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	778.85	663.46	451.92
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17

# WASTE STREAM PROFILES

CAO-94-1005, Rev. 0  
(CONTINUED) June 1994

29-Jun-94

DATABASE WS ID	IN-W219	HANDLING	RH	FIELD OFFICE	Idaho
WS NAME	UNCEMENTED INORGANIC SLUDGE (TRU): SOLIDIFIED GRINDING SLUDGE, ETC.				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3150	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**IDC's**  
 Site ID-EGG-102T-030  
 Assigned RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	10
Projected	0
<b>Total</b>	<b>10</b>

**EPA CODE(s)**

F002
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22, 23

# WASTE STREAM PROFILES

CAO-94-1005, Rev. 0  
(CONTINUED) June 1994

29-Jun-94

DATABASE WS ID	IN-W220	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNCEMENTED ORGANIC SLUDGE (TRU): RESEARCH GENERATED WASTE NONCOMPACTIBLE SOLID				
NO MIGRATION VARIANCE PETITION	ID 111 (3)				
WASTE MATRIX CODE - Site	3150	WIPP PART B APPLICATION	INORGANIC WASTE WATER TREA		
- Group	Solidified Organic Waste		TRUCON	ID 111 (3)	

**IDC's**

Site: ID-EGG-102T-111

Assigned: RF-801

**WASTE VOLUMES (cu. m.)**

Retrievable	554
Projected	0
<b>Total</b>	<b>554</b>

**EPA CODE(S)**

D002B
P015
F005A
F003
F003
F002
F001
F003
F001
F003
F001
D009A
D008A
D007A
D006A
D005A
D004A
F001
F001

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	1134.62	923.08	350.96
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 25

Information Only

259

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W221	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNCEMENTED INORGANIC SLUDGE (TRU): SOLID LAB WASTE				
NO MIGRATION VARIANCE PETITION	ID 113 (3)				
WASTE MATRIX CODE	- Site	3113	WIPP PART B APPLICATION	SOLIDIFIED LIQUID (UNSPECIFIED)	
	- Group	Solidified Inorganic Waste		TRUCON	ID 113 (3)

**IDC's**

Site ID-EGG-102T-113

Assigned RF-800

**WASTE VOLUMES (cu. m.)**

Retrievable	14
Projected	0
<b>Total</b>	<b>14</b>

**EPA CODE(s)**

F003
D002B
F003
F003

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17

Information Only

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29-Jun-94

DATABASE WS ID	IN-W222	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNCEMENTED INORGANIC SLUDGE (TRU): CEMENTED SLUDGE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3150	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete	

**DC's**

Site ID-EGG-102T-292

Assigned RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	276
Projected	0
Total	276

**EPA CODE(s)**

F001
F001
D002B
D006A
D008A
F003
F002
F003
F003
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

264

29-Jun-94

<b>DATABASE WS ID</b>	IN-W225	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	BENELEX, PLEXIGLASS (TRU): BENELEX AND PLEXIGLASS				
<b>NO MIGRATION VARIANCE PETITION</b>	ID 221				
<b>WASTE MATRIX CODE</b>	- Site	5440	<b>WIPP PART B APPLICATION</b>	BENELEX AND PLEXIGLAS	
	- Group	Heterogeneous Waste		TRUCON	ID 221

**IDC's**

Site ID-EGG-109T-302

Assigned RF-302

**WASTE VOLUMES (cu. m.)**

Retrievable	22
Projected	0
<b>Total</b>	<b>22</b>

**EPA CODE(s)**

F001
F001
F001
D008C

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	1.92	1.92	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals	7.69	7.69	0.00
	Other Materials	86.54	86.54	0.00
	<b>Organics</b>	Celulosics	40.38	40.38
Rubber				
Plastics		296.15	296.15	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16

29-Jun-94

DATABASE WS ID	IN-W228	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNCEMENTED INORGANIC SLUDGE (TRU): SECOND STAGE SLUDGE				
NO MIGRATION VARIANCE PETITION	ID 211				
WASTE MATRIX CODE - Site	3121	WIPP PART B APPLICATION	INORGANIC WASTE WATER TREA		
- Group	Solidified Inorganic Waste	TRUCON	ID 211		

**IDC's**

Site ID-EGG-102T-002

Assigned RF-807

**WASTE VOLUMES (cu. m.)**

Retrievable	1297
Projected	0
<b>Total</b>	<b>1297</b>

**EPA CODE(s)**

D006A
F003
F003
F003
F002
F001
F001
F001
P015
D028
D003E
D002B
F001
D005A
D022
D007A
D008A
D009A
D009D
D011A
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>			
	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17

203

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W230	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	CONCRETE - BRICK (TRU): INORGANIC SOLID WASTE				
NO MIGRATION VARIANCE PETITION	ID 122 (3)				
WASTE MATRIX CODE	- Site	5200	WIPP PART B APPLICATION	FIREBRICK AND CERAMIC CRUCIB	
	- Group	Inorganic Non-metal Waste		TRUCON	ID 122 (3)

**IDC's**

Site: ID-EGG-115T-122

Assigned: RF-370

**WASTE VOLUMES (cu. m.)**

Retrievable	18
Projected	0
<b>Total</b>	<b>18</b>

**EPA CODE(s)**

F001
F001
F002
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	528.85	528.85	0.00
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 25

29-Jun-94

DATABASE WS ID	IN-W240	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	GLASS (TRU): GLASS WASTE				
NO MIGRATION VARIANCE PETITION	ID 118 (3)				
WASTE MATRIX CODE	- Site	5220	WIPP PART B APPLICATION	GLASS (UNSPECIFIED)	
	- Group	Inorganic Non-metal Waste		TRUCON	ID 118 (3)

Site **IDC's**  
 ID-EGG-119T-118  
 Assigned RF-440

**WASTE VOLUMES (cu. m.)**

Retrievable	169
Projected	0
Total	169

**EPA CODE(s)**

F001
D002B
D008A
D009A
F001
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	290.75	290.75	0.00
	Organics			
	Celulosics	1.10	1.10	0.00
	Rubber	1.10	1.10	0.00
	Plastics	19.82	19.82	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 25

265

29-Jun-94

<b>DATABASE WS ID</b>	IN-W243	<b>HANDLING/CH</b>		<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	GLASS (TRU): GLASS				
<b>NO MIGRATION VARIANCE PETITION</b>	ID 218				
<b>WASTE MATRIX CODE - Site</b>	5220	<b>WIPP PART B APPLICATION</b>	GLASS		
<b>- Group</b>	Inorganic Non-metal Waste		<b>TRUCON</b>	ID 218	

**IDC's**

Site ID-EGG-119T-440

Assigned RF-440

**WASTE VOLUMES (cu. m.)**

Retrievable	248
Projected	0
<b>Total</b>	<b>248</b>

**EPA CODE(s)**

F001
D002B
D008A
D008C
F001
F001
F002
F003
F005
D029

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	290.75	290.75	0.00
	<b>Organics</b>			
	Celulosics	1.10	1.10	0.00
	Rubber	1.10	1.10	0.00
	Plastics	19.82	19.82	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16

29-Jun-94

<b>DATABASE WS ID</b>	IN-W245	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	GLASS (TRU): UNLEACHED RASHIG RINGS				
<b>NO MIGRATION VARIANCE PETITION</b>	ID 225				
<b>WASTE MATRIX CODE</b>	- Site	8900	<b>WIPP PART B APPLICATION</b>	GLASS (OIL RESIDUE)	
	- Group	Inorganic Non-metal Waste		TRUCON	ID 225

**IDC's**

Site ID-EGG-119T-441

Assigned RF-440

**WASTE VOLUMES (cu. m.)**

Retrievable	169
Projected	0
<b>Total</b>	<b>169</b>

**EPA CODE(s)**

F001
D001C
D002B
D008A
D008C
F001
F001

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	290.75	290.75	0.00
<b>Organics</b>	Celulosics	1.10	1.10	0.00
	Rubber	1.10	1.10	0.00
	Plastics	19.82	19.82	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**Footnotes:** 13, 16, 17, 18

267

29-Jun-94

DATABASE WS ID	IN-W247	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	GLASS (TRU): LEACHED RASHIG RINGS				
NO MIGRATION VARIANCE PETITION	ID 218				
WASTE MATRIX CODE - Site	8900	WIPP PART B APPLICATION	GLASS		
- Group	Inorganic Non-metal Waste		TRUCON	ID 218	

IDC's

Site ID-EGG-119T-442

Assigned RF-440

WASTE VOLUMES (cu. m.)

Retrievable	199
Projected	0
Total	199

EPA CODE(s)

F001
F001
D008A
D028
F001
D002B
F002
F003
F003
F005A
F005A
F001
D029

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	290.75	290.75	0.00
Organics	Celulosics	1.10	1.10	0.00
	Rubber	1.10	1.10	0.00
	Plastics	19.82	19.82	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
	Packaging Materials			
	Steel		141.83	
	Plastic		39.42	

Footnotes: 13, 16, 18

Information Only



29-Jun-94

DATABASE WS ID	IN-W249	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	GLASS (TRU): GLASS, FLASKS, SAMPLE VIALS, ETC.				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	8900	WIPP PART B APPLICATION	GLASS (UNSPECIFIED)		
- Group	Inorganic Non-metal Waste	TRUCON	Information Incomplete		

**IDC's**

Site ID-EGG-119T-810

Assigned RF-440

**WASTE VOLUMES (cu. m.)**

Retrievable	3
Projected	0
Total	3

**EPA CODE(s)**

D009D
D009A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	290.75	290.75	0.00
<b>Organics</b>	Celulosics	1.10	1.10	0.00
	Rubber	1.10	1.10	0.00
	Plastics	19.82	19.82	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 13, 16, 17, 18, 21, 22

218

29-Jun-94

<b>DATABASE WS ID</b>	IN-W250	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	GLOVEBOX GLOVES (TRU): LEADED RUBBER				
<b>NO MIGRATION VARIANCE PETITION</b>	ID 123 (3)				
<b>WASTE MATRIX CODE</b>	- Site	5311	<b>WIPP PART B APPLICATION</b>	LEADED RUBBER (UNSPECIFIED)	
	- Group	Combustible Waste	<b>TRUCON</b>	ID 123 (3)	

**DC's**

Site: ID-EGG-120T-123

Assigned: RF-339

**WASTE VOLUMES (cu. m.)**

Retrievable	64
Projected	0
Total	64

**EPA CODE(s)**

D008C

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	504.81	254.81	0.00
	Other Materials	144.23	28.85	0.00
<b>Organics</b>	Celulosics	10.10	5.77	0.00
	Rubber	464.42	265.38	0.00
	Plastics	30.29	17.31	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17

29-Jun-94

<b>DATABASE WS ID</b>	IN-W252	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	GLOVEBOX GLOVES (TRU); LEADED RUBBER GLOVES AND APRONS				
<b>NO MIGRATION VARIANCE PETITION</b>	ID 223				
<b>WASTE MATRIX CODE - Site</b>	5311	<b>WIPP PART B APPLICATION</b>	LEADED RUBBER		
<b>- Group</b>	Combustible Waste		<b>TRUCON</b>	ID 223	

**IDC's**

Site ID-EGG-120T-339

Assigned RF-339

**WASTE VOLUMES (cu. m.)**

Retrievable	160
Projected	0
<b>Total</b>	<b>160</b>

- EPA CODE(s)**
- D022
  - F001
  - D008C
  - D026
  - D029
  - F001
  - F001
  - F005A
  - F001
  - F005A
  - F003
  - F003
  - F003
  - F003
  - F002

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	504.81	254.81	0.00
	Other Materials	144.23	28.85	0.00
	<b>Organics</b>			
	Celulosics	10.10	5.77	0.00
	Rubber	464.42	265.38	0.00
	Plastics	30.29	17.31	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16

29-Jun-94

DATABASE WS ID	IN-W254	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	GLOVEBOX GLOVES (TRU): LEADED RUBBER GLOVES AND APRONS				
NO MIGRATION VARIANCE PETITION	ID 223				
WASTE MATRIX CODE - Site	5311	WIPP PART B APPLICATION	LEADED RUBBER		
- Group	Combustible Waste	TRUCON	ID 223		

IDC's

Site ID-EGG-120T-463

Assigned RF-339

**WASTE VOLUMES (cu. m.)**

Retrievable	10
Projected	0
Total	10

**EPA CODE(s)**

F001
F001
F001
F002
D008C

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	504.81	254.81	0.00
	Other Materials	144.23	28.85	0.00
	<b>Organics</b>			
	Celulosics	10.10	5.77	0.00
	Rubber	464.42	265.38	0.00
	Plastics	30.29	17.31	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 14, 16, 17, 21, 22, 27

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W256	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	GLOVEBOX GLOVES (TRU); DRY BOX GLOVES AND O-RINGS				
NO MIGRATION VARIANCE PETITION	ID NYD				
WASTE MATRIX CODE	- Site	5311	WIPP PART B APPLICATION	LEADED RUBBER (UNSPECIFIED)	
	- Group	Combustible Waste		TRUCON	Information Incomplete

**IDC's**

Site ID-EGG-120T-802

Assigned RF-339

**WASTE VOLUMES (cu. m.)**

Retrievable	26
Projected	0
Total	26

**EPA CODE(s)**

D008C

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	504.81	254.81	0.00
	Other Materials	144.23	28.85	0.00
<b>Organics</b>	Celulosics	10.10	5.77	0.00
	Rubber	464.42	265.38	0.00
	Plastics	30.29	17.31	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 19.

Information Only

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W257	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	RADIOACTIVE SOURCES (TRU): SOLIDIFIED FUEL SLUDGE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3000	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

IDC's  
 Site ID-EGG-144T-151  
 Assigned MD-827

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

EPA CODE(s)  
D008C

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	0.32	0.24	0.00
	Other Materials	17.31	17.31	0.00
	<b>Organics</b>	Celulosics	918.75	63.03
Rubber		212.02	19.18	0.00
Plastics		1060.10	191.83	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 2, 16, 17, 21, 22, 23

**WASTE STREAM PROFILES (CONTINUED)** CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W259	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	RADIOACTIVE SOURCES (TRU): ALPHA HOT CELL WASTE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5400	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

**IDC's**

Site: ID-EGG-144T-104

Assigned: OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	59
Projected	0
Total	59

**EPA CODE(s)**

D008A

<u>WASTE PARAMETERS (kg/m3)</u>		<u>Max</u>	<u>Avg</u>	<u>Min</u>
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22, 23

Information Only

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W260	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	RADIOACTIVE SOURCES (TRU): SOLID BINARY SCRAP POWDER, ETC.				
NO MIGRATION VARIANCE PETITION	ID NYD				
WASTE MATRIX CODE - Site	3100	WIPP PART B APPLICATION	Information Incomplete		
- Group	Unspecified Metal Waste	TRUCON	Information Incomplete		

**IDC's**

Site	ID-EGG-144T-040
Assigned	RF-480

**WASTE VOLUMES (cu. m.)**

Retrievable	36
Projected	0
<b>Total</b>	<b>36</b>

**EPA CODE(s)**

D008C
D008A

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	<b>Organics</b>	Celulosics	45.27	7.43
Rubber				
Plastics		67.57	15.09	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 23



29-Jun-94

<b>DATABASE WS ID</b>	IN-W263	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	PARTICULATE WASTES (TRU): CONTAMINATED SOIL				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	4200	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Soil	<b>TRUCON</b>	Information Incomplete	

**IDC's**

Site ID-EGG-141T-842

Assigned MD-842

**WASTE VOLUMES (cu. m.)**

Retrievable	38
Projected	0
Total	38

**EPA CODE(s)**

D010A
D002B
D003E
D006A
D007A
D009A
D011A
D008A

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	0.57	0.57	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals	0.15	0.08	0.00
	Other Materials	33.91	5.70	0.00
	<b>Organics</b>	Celulosics	0.71	0.71
Rubber				
Plastics				
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil	671.46	564.57	457.45
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 21, 22, 23

29-Jun-94

DATABASE WS ID	IN-W265	HANDLING/CH	FIELD OFFICE	Idaho
WS NAME	PARTICULATE WASTES (TRU): BLACKTOP, CONCRETE, DIRT AND SAND			
NO MIGRATION VARIANCE PETITION	ID 121			
WASTE MATRIX CODE - Site	5430	WIPP PART B APPLICATION	BENELEX AND PLEXIGLASS	
- Group	Heterogeneous Waste		TRUCON/ID 121	

**IDC's**  
 Site ID-EGG-141T-374  
 Assigned RF-374

**WASTE VOLUMES (cu. m.)**

Retrievable	53
Projected	0
<b>Total</b>	<b>53</b>

**EPA CODE(s)**

F001
F004
F001
F001
F001
F001
F001
F003
F003
F003
F002

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	3072.12	584.13	0.00
<b>Organics</b>	Celulosics	12.02	12.02	0.00
	Rubber			
	Plastics	12.02	12.02	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil	144.23	64.90	0.00
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16

29-Jun-94

<b>DATABASE WS ID</b>	IN-W267	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	PARTICULATE WASTES (TRU): GRIT				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	3112	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Solidified Inorganic Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site ID-EGG-141T-372

Assigned RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	7
Projected	0
Total	7

**EPA CODE(s)**

P015

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**Footnotes:** 3, 8, 16, 17, 21, 22, 23

29-Jun-94

DATABASE WS ID	IN-W269	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	PARTICULATE WASTES (TRU): LABORATORY WASTE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5000	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

IDC's

Site ID-EGG-141T-150

Assigned OR-001

WASTE VOLUMES (cu. m.)

Retrievable	26
Projected	0
Total	26

EPA CODE(s)

D002B
D008A

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	Organics	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
Solidified	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
Soils	Soil			
	Packaging Materials			
	Steel		141.83	
	Plastic		39.42	

Footnotes: 9, 16, 17, 21, 22, 23

29-Jun-94

DATABASE WS ID	IN-W271	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	NONMETAL MOLDS AND CRUCIBLES (TRU): CONTAMINATED MERCURY OR GRAPHITE CRUCIBLES				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3190	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste		TRUCON	Information Incomplete	

IDC's

Site ID-EGG-137T-814

Assigned MD-824

WASTE VOLUMES (cu. m.)

Retrievable	0
Projected	0
Total	0

EPA CODE(s)

D009D
D009B

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	1528.85	415.63	2.16
	Aluminum-Based Metals/Alloys	38.22	17.50	0.00
	Other Metals	46.63	4.81	0.00
	Other Materials	812.50	48.08	0.00
	Organics	Celulosics		
Rubber				
Plastics		4.81	4.81	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 19, 21, 22, 23

29-Jun-94

DATABASE WS ID	IN-W272	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	NONMETAL MOLDS AND CRUCIBLES (TRU): COARSE GRAPHITE				
NO MIGRATION VARIANCE PETITION	ID 115				
WASTE MATRIX CODE - Site	5000	WIPP PART B APPLICATION	GRAPHITE		
- Group	Graphite Waste	TRUCON	ID 115		

IDC's  
 Site ID-EGG-137T-312  
 Assigned RF-312

WASTE VOLUMES (cu. m.)

Retrievable	2
Projected	0
Total	2

EPA CODE(s)

F002
F001

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	336.54	31.25	0.00
Organics	Celulosics			
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 9,16

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W275	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	NONMETAL MOLDS AND CRUCIBLES (TRU): GRAPHITE CORES				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5000	WIPP PART B APPLICATION	GRAPHITE (UNSPECIFIED)		
- Group	Graphite Waste	TRUCON	Information Incomplete		

**IDC's**

Site ID-EGG-137T-301

Assigned RF-300

**WASTE VOLUMES (cu. m.)**

Retrievable	6
Projected	0
Total	6

**EPA CODE(s)**

F001

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	798.12	65.73	0.00
<b>Organics</b>	Celulosics			
	Rubber			
<b>Solidified</b>	Plastics			
	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 9, 16, 17, 21, 22

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W276	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	NONMETAL MOLDS AND CRUCIBLES (TRU): GRAPHITE				
NO MIGRATION VARIANCE PETITION	ID 215				
WASTE MATRIX CODE - Site	5000	WIPP PART B APPLICATION	GRAPHITE		
- Group	Graphite Waste		TRUCON	ID 215	

IDC's

Site ID-EGG-137T-300

Assigned RF-300

**WASTE VOLUMES (cu. m.)**

Retrievable	392
Projected	0
Total	392

**EPA CODE(s)**

F001
D022
D028
F001
F001
F002
F003
F005A
F005A
F001

**WASTE PARAMETERS (kg/m<sup>3</sup>)**

		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	798.12	65.73	0.00
	Organics			
Solidified	Celulosics			
	Rubber			
Soils	Plastics			
	Organic Matrix			
Packaging Materials	Inorganic Matrix			
	Soil			
	Steel		141.83	
	Plastic		39.42	

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Footnotes: 6, 9, 16

Information Only



29-Jun-94

DATABASE WS ID	IN-W278	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	MISCELLANEOUS (PAPER, METAL, ETC.) (TRU): LOW SPECIFIC ACTIVITY METAL, GLASS, ETC.				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5000	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste	TRUCON	Information Incomplete		

EC's

Site ID-EGG-134T-950

Assigned OR-001

WASTE VOLUMES (cu. m.)

Retrievable	14
Projected	0
Total	14

EPA CODE(s)

D008C
D008A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	Organics	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
Solidified	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

**WASTE STREAM PROFILES (CONTINUED)** CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W280	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	METALS (TRU): METAL, EQUIPMENT, PIPES, VALVES, ETC.				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5100	WIPP PART B APPLICATION	METAL (UNSPECIFIED)		
- Group	Unspecified Metal Waste	TRUCON	Information Incomplete		

Site **IDC's**  
 ID-EGG-132T-803  
 Assigned MD-824

**WASTE VOLUMES (cu. m.)**

Retrievable	35
Projected	0
Total	35

**EPA CODE(s)**

DO09A
DO09D

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	1528.85	415.63	2.16
	Aluminum-Based Metals/Alloys	38.22	17.50	0.00
	Other Metals	46.63	4.81	0.00
	Other Materials	812.50	48.08	0.00
	Organics	Celulosics		
Rubber				
Plastics		4.81	4.81	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 23

Information Only

29-Jun-94

DATABASE WS ID	IN-W281	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	MISCELLANEOUS (PAPER, METAL, ETC.) (TRU): NONCOMBUSTIBLE EQUIPMENT BOXES				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5400	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste	TRUCON	Information Incomplete		

DC's

Site ID-EGG-134T-824

Assigned MD-824

WASTE VOLUMES (cu. m.)

Retrievable	371
Projected	0
Total	371

EPA CODE(s)

D008A
D007A
D006A
D005A
D010A
D011A
D009A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	1528.85	415.63	2.16
	Aluminum-Based Metals/Alloys	38.22	17.50	0.00
	Other Metals	46.63	4.81	0.00
	Other Materials	812.50	48.08	0.00
	Organics	Celulosics		
Rubber				
Plastics		4.81	4.81	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 21, 22, 23

227

**WASTE STREAM PROFILES** (CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

<b>DATABASE WS ID</b>	IN-W283	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	MISCELLANEOUS (PAPER, METAL, ETC.) (TRU): AMERICIUM PROCESS RESIDUE				
<b>NO MIGRATION VARIANCE PETITION</b>	ID 225				
<b>WASTE MATRIX CODE - Site</b>	5400	<b>WIPP PART B APPLICATION</b>	GLASS (UNSPECIFIED)		
<b>- Group</b>	Heterogeneous Waste		<b>TRUCON</b>	ID 225	

**IDC's**

Site ID-EGG-134T-241

Assigned OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
<b>Total</b>	<b>1</b>

**EPA CODE(s)**

F002
D008C
D002B
D001C
F003

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17

Information Only

29-Jun-94

DATABASE WS ID	IN-W285	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	MISCELLANEOUS (PAPER, METAL, ETC.) (TRU): NONCOMBUSTIBLE SOLIDS				
NO MIGRATION VARIANCE PETITION	ID NYD				
WASTE MATRIX CODE	- Site	5400	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

**IDC's**

Site: ID-EGG-134T-201

Assigned: OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	65
Projected	0
<b>Total</b>	<b>65</b>

**EPA CODE(s)**

D008C

<u>WASTE PARAMETERS (kg/m3)</u>		<u>Max</u>	<u>Avg</u>	<u>Min</u>
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

M I N A R Y

Footnotes: 16, 17, 21, 23

259

29-Jun-94

<b>DATABASE WS ID</b>	IN-W287	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	MISCELLANEOUS (PAPER, METAL, ETC.) (TRU): CUT UP GLOVEBOXES				
<b>NO MIGRATION VARIANCE PETITION</b>	ID NYD				
<b>WASTE MATRIX CODE</b>	- Site	5100	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Unspecified Metal Waste	<b>TRUCON</b>	Information Incomplete	

**DC's**

Site: ID-EGG-134T-101

Assigned: AE-121

**WASTE VOLUMES (cu. m.)**

Retrievable	212
Projected	0
<b>Total</b>	<b>212</b>

**EPA CODE(s)**

D008C
D008A

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	405.26	213.16	42.11
	Aluminum-Based Metals/Alloys	73.68	34.21	0.00
	Other Metals	44.21	15.79	0.00
	Other Materials	141.05	33.68	0.00
<b>Organics</b>	Celulosics	115.00	56.84	0.00
	Rubber	2.42	0.63	0.00
	Plastics	24.21	5.68	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 23

729

29-Jun-94

DATABASE WS ID	IN-W289	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	MISCELLANEOUS (PAPER, METAL, ETC.) (TRU): DDW NONCOMBUSTIBLE SOLIDS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	8200	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste	TRUCON	Information Incomplete		

**DC's**

Site ID-EGG-134T-121

Assigned MD-824

**WASTE VOLUMES (cu. m.)**

Retrievable	25
Projected	0
Total	25

**EPA CODE(s)**

F002
D004A
D005A
D006A
D007A
D008A
F001
P015
D009A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1528.85	415.63	2.16
	Aluminum-Based Metals/Alloys	38.22	17.50	0.00
	Other Metals	46.63	4.81	0.00
	Other Materials	812.50	48.08	0.00
	<b>Organics</b>	Celulosics		
Rubber				
Plastics		4.81	4.81	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 13, 16, 17, 19, 21, 22, 23

291

**WASTE STREAM PROFILES** (CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

<b>DATABASE WS ID</b>	IN-W291	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	MISCELLANEOUS (PAPER, METAL, ETC.) (TRU):GENERAL PLANT WASTE				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	5000	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Heterogeneous Waste		<b>TRUCON</b>	Information Incomplete

**IDC's**

Site ID-EGG-134T-100

Assigned OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	770
Projected	0
Total	770

**EPA CODE(s)**

F003
D001C

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>			
	Steel		141.83	
	Plastic		39.42	

Footnotes: 9, 16, 17, 21, 22, 23

**Information Only**



**WASTE STREAM PROFILES (CONTINUED)** CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W294	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	METALS (TRU): LEACHED NON SPECIAL SOURCE METAL				
NO MIGRATION VARIANCE PETITION	ID 217				
WASTE MATRIX CODE	- Site	5100	WIPP PART B APPLICATION	METAL	
	- Group	Unspecified Metal Waste		TRUCON	ID 217

**IDC's**

Site	ID-EGG-132T-481
Assigned	RF-480

**WASTE VOLUMES (cu. m.)**

Retrievable	443
Projected	0
<b>Total</b>	<b>443</b>

**EPA CODE(s)**

F001
F001
D008A
D008C
F001
F001
F002
F005
D022

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	<b>Organics</b>	Celulosics	45.27	7.43
Rubber				
Plastics		67.57	15.09	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17

Information Only

293

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W296	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	METALS (TRU): NON SPECIAL SOURCE METAL				
NO MIGRATION VARIANCE PETITION	ID 217				
WASTE MATRIX CODE	- Site	5100	WIPP PART B APPLICATION	METAL	
	- Group	Unspecified Metal Waste		TRUCON	ID 217

**IDC's**

Site	ID-EGG-132T-480
Assigned	RF-480

**WASTE VOLUMES (cu. m.)**

Retrievable	5243
Projected	0
<b>Total</b>	<b>5243</b>

**EPA CODE(s)**

F001
F003
D008A
D008C
D028
D029
F001
F001
F002
F005A
F003
F003
F003
F005A
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	<b>Organics</b>	Celulosics	45.27	7.43
Rubber				
Plastics		67.57	15.09	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16

29-Jun-94

DATABASE WS ID	IN-W298	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	METALS (TRU): TANTALUM				
NO MIGRATION VARIANCE PETITION	ID 217				
WASTE MATRIX CODE - Site	5100	WIPP PART B APPLICATION	METAL		
- Group	Unspecified Metal Waste		TRUCON	ID 217	

JDC's

Site ID-EGG-132T-320

Assigned RF-320

WASTE VOLUMES (cu. m.)

Retrievable	75
Projected	0
Total	75

EPA CODE(s)

F001
D008A
F001
F001
F002
D008C

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	317.31	83.65	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals	1586.54	195.19	0.00
	Other Materials	19.23	19.23	0.00
Organics	Celulosics			
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16

295

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W300	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	METALS (TRU): METAL WASTE				
NO MIGRATION VARIANCE PETITION	ID 117 (3)				
WASTE MATRIX CODE	- Site	5100	WIPP PART B APPLICATION	METAL (UNSPECIFIED)	
	- Group	Unspecified Metal Waste		TRUCON	ID 117 (3)

**IDC's**

Site: ID-EGG-132T-117

Assigned: RF-480

**WASTE VOLUMES (cu. m.)**

Retrievable	1513
Projected	0
<b>Total</b>	<b>1513</b>

**EPA CODE(s)**

F001
F001
D008A
D008C
P015
F002
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	<b>Organics</b>	Celulosics	45.27	7.43
Rubber				
Plastics		67.57	15.09	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 25

Information Only

29-Jun-94

DATABASE WS ID	IN-W302	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	METALS (TRU): NONCOMPRESSIBLE, NONCOMBUSTIBLE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	8200	WIPP PART B APPLICATION	METAL (UNSPECIFIED)		
- Group	Heterogeneous Waste		TRUCON	Information Incomplete	

**IDC's**

Site	ID-EGG-132T-020
Assigned	OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	106
Projected	0
<b>Total</b>	<b>106</b>

**EPA CODE(s)**

F002
F001
D002B

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 13, 16, 17, 19, 21, 23

10/17

# WASTE STREAM PROFILES (CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W306.1	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNCATEGORIZED (TRU): PRE 73 DRUMS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	8200	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**IDC's**

Site	ID-EGG-287T-9999
Assigned	RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	1906
Projected	0
<b>Total</b>	<b>1906</b>

<u>WASTE PARAMETERS (kg/m<sup>3</sup>)</u>		<u>Max</u>	<u>Avg</u>	<u>Min</u>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 18, 21, 22, 23

Information Only

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W306.2	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNCATEGORIZED (TRU): PRE 73 DRUMS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	8200	WIPP PART B APPLICATION	Information Incomplete		
- Group	Unspecified Metal Waste		TRUCON	Information Incomplete	

**IDC's**

Site	ID-EGG-287T-9999
Assigned	RF-480

**WASTE VOLUMES (cu. m.)**

Retrievable	3119
Projected	0
<b>Total</b>	<b>3119</b>

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
<b>Organics</b>	Celulosics	45.27	7.43	0.00
	Rubber			
<b>Solidified</b>	Plastics	67.57	15.09	0.00
	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 18, 21, 22, 23

Information Only

299

29-Jun-94

DATABASE WS ID	IN-W306.3	HANDLING/CH	FIELD OFFICE	Idaho
WS NAME	UNCATEGORIZED (TRU): PRE 73 DRUMS			
NO MIGRATION VARIANCE PETITION	Information Incomplete			
WASTE MATRIX CODE	- Site	8200	WIPP PART B APPLICATION	Information Incomplete
	- Group	Heterogeneous Waste		TRUCON   Information Incomplete

**IDC's**

Site: ID-EGG-287T-9999

Assigned: OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	3465
Projected	0
<b>Total</b>	<b>3465</b>

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 18, 21, 22, 23

Information Only



**WASTE STREAM PROFILES** (CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

<b>DATABASE WS ID</b>	IN-W306.4	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	UNCATEGORIZED (TRU): PRE 73 DRUMS				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	8200	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Filter Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site ID-EGG-287T-9999

Assigned RF-335

**WASTE VOLUMES (cu. m.)**

Retrievable	1040
Projected	0
<b>Total</b>	<b>1040</b>

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	500.00	168.27	48.08
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 18, 21, 22, 23

**Information Only**

301

**WASTE STREAM PROFILES** (CONTINUED) CAO-94-1005, Rev. 0

June 1994

29-Jun-94

<b>DATABASE WS ID</b>	IN-W308	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	UNCATEGORIZED (TRU): NOT RECORDED - UNKNOWN				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	8200	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Unknown Waste	<b>TRUCON</b>	Information Incomplete	

**DC's**

Site **ID-EGG-287T-000**

Assigned **UNK**

**WASTE VOLUMES (cu. m.)**

Retrievable	4140
Projected	0
<b>Total</b>	<b>4140</b>

**EPA CODE(s)**

**UNK**

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**Footnotes:** 16, 21, 22, 23, 26

**Information Only**

**WASTE STREAM PROFILES (CONTINUED)** CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W311	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	SALTS (TRU): MOLTEN SALTS - 30% UNPULVERIZED				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3140	WIPP PART B APPLICATION	PYROCHEMICAL SALT (UNSPECIFI		
- Group	Salt Waste	TRUCON	Information Incomplete		

**DC's**

Site ID-EGG-146T-409

Assigned RF-429

**WASTE VOLUMES (cu. m.)**

Retrievable	7
Projected	0
Total	7

**EPA CODE(s)**

F001
D028

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	14.42	12.02	0.48
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	567.30	216.30	48.10
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22

**Information Only**

70

**WASTE STREAM PROFILES** (CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W312	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	SALTS (TRU): PYROCHEMICAL SALT WASTE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3140	WIPP PART B APPLICATION	PYROCHEMICAL SALT (UNSPECIFI)		
- Group	Salt Waste	TRUCON	Information Incomplete		

IDC's  
 Site ID-EGG-146T-124  
 Assigned RF-411

**WASTE VOLUMES (cu. m.)**

Retrievable	3
Projected	0
Total	3

**EPA CODE(s)**

D003D

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	101.57	101.57	0.00
Organics	Celulosics			
	Rubber			
Solidified	Plastics			
	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22

**Information Only**

29-Jun-94

<b>DATABASE WS ID</b>	IN-W314	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	SALTS (TRU): DIRECT OXIDE REDUCTION SALT				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	3140	<b>WIPP PART B APPLICATION</b>	PYROCHEMICAL SALT (UNSPECIFI		
<b>- Group</b>	Salt Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

**EPA CODE(s)**

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	14.42	12.02	4.81
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	584.33	216.35	46.63
<b>Organics</b>	Celulosics			
	Rubber			
<b>Solidified</b>	Plastics			
	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes:

Information Only

305

29-Jun-94

DATABASE WS ID	IN-W315	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	SALTS (TRU): EVAPORATOR SALTS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3140	WIPP PART B APPLICATION	PYROCHEMICAL SALT (UNSPECIFI		
- Group	Salt Waste	TRUCON	Information Incomplete		

IDC's  
 Site ID-EGG-146T-005  
 Assigned RF-429

WASTE VOLUMES (cu. m.)

Retrievable	1
Projected	0
Total	1

EPA CODE(s)

D001C

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	14.42	12.02	0.48
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	567.30	216.30	48.10
	Organics			
	Celulosics			
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 21, 22

Information Only

29-Jun-94

DATABASE WS ID	IN-W317	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	RESINS (TRU): LEACHED AND CEMENTED RESIN				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3150	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Organic Waste		TRUCON	Information Incomplete

IDC's

Site ID-EGG-145T-432

Assigned RF-806.1

WASTE VOLUMES (cu. m.)

Retrievable	52
Projected	0
Total	52

EPA CODE(s)

F002
F001
F001
F001
D008A

WASTE PARAMETERS (kg/m<sup>3</sup>) Max Avg Min

		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics			
	Celulosics			
	Rubber			
	Plastics			
Solidified	Organic Matrix	2012.02	625.00	164.90
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 19, 21, 22, 23

29-Jun-94

DATABASE WS ID	IN-W319	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	RESINS (TRU): LEACHED RESIN				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3115	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Organic Waste		TRUCON	Information Incomplete	

**DC's**  
 Site ID-EGG-145T-431  
 Assigned RF-806.1

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	0
Total	2

EPA CODE(s)  
 D001C

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics			
	Celulosics			
	Rubber			
	Plastics			
Solidified	Organic Matrix	2012.02	625.00	164.90
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 3, 8, 16, 17, 19, 21, 22, 23,

308



29-Jun-94

<b>DATABASE WS ID</b>	IN-W321	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	RESINS (TRU): UNLEACHED ION COLUMN RESIN				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	3115	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Solidified Organic Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site ID-EGG-145T-430

Assigned RF-806.1

**WASTE VOLUMES (cu. m.)**

Retrievable	11
Projected	0
Total	11

**EPA CODE(s)**

D001A

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	2012.02	625.00	164.90
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 3, 8, 16, 17, 19, 21, 22, 23

29-Jun-94

<b>DATABASE WS ID</b>	IN-W323	<b>HANDLING</b>	RH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	RADIOACTIVE SOURCES (TRU): COMBUSTIBLE LAB WASTE				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	5440	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Heterogeneous Waste	<b>TRUCON</b>	Information Incomplete	

**IDC's**

Site ID-EGG-144T-153

Assigned AE-120

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	0
Total	2

**EPA CODE(s)**

D008C

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	63.16	36.84	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	10.53	2.63	0.00
	<b>Organics</b>	Celulosics	450.95	213.16
Rubber		7.16	2.37	0.00
Plastics		57.26	21.32	1.58
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

29-Jun-94

DATABASE WS ID	IN-W325	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNKNOWN (TRU); CLASSIFIED PARTS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5300	WIPP PART B APPLICATION	Information Incomplete		
- Group	Combustible Waste	TRUCON	Information Incomplete		

IDC's

Site ID-EGG-288T-815

Assigned MD-827

WASTE VOLUMES (cu. m.)

Retrievable	0
Projected	0
Total	0

EPA CODE(s)

UNK

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	0.32	0.24	0.00
	Other Materials	17.31	17.31	0.00
	Organics	Celulosics	918.75	63.03
Rubber		212.02	19.18	0.00
Plastics		1060.10	191.83	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

29-Jun-94

DATABASE WS ID	IN-W327	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNKNOWN (TRU): LOW SPECIFIC ACTIVITY < 100 nC/g COMBUSTIBLE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5300	WIPP PART B APPLICATION	Information Incomplete		
- Group	Combustible Waste	TRUCON	Information Incomplete		

**IDC's**

Site ID-EGG-268T-847

Assigned MD-827

**WASTE VOLUMES (cu. m.)**

Retrievable	4
Projected	0
Total	4

**EPA CODE(s)**

UNK

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	0.32	0.24	0.00
	Other Materials	17.31	17.31	0.00
<b>Organics</b>	Celulosics	918.75	63.03	0.00
	Rubber	212.02	19.18	0.00
	Plastics	1060.10	191.83	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22, 23

**Information Only**

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W329	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNKNOWN (TRU): LOW SPECIFIC ACTIVITY < 100 nCi/g NONCOMBUSTIBLE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5400	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

**EPA CODE(s)**

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1528.85	415.63	2.16
	Aluminum-Based Metals/Alloys	38.22	17.50	0.00
	Other Metals	46.63	4.81	0.00
	Other Materials	812.50	48.08	0.00
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics	4.81	4.81	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes:

29-Jun-94

<b>DATABASE WS ID</b>	IN-W330	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	UNKNOWN (TRU): PLASTIC, TYGON, MANIPULATOR BOOTS, ETC.				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b> - Site	5310	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
- Group	Combustible Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site ID-EGG-288T-801

Assigned MD-827

**WASTE VOLUMES (cu. m.)**

Retrievable	7
Projected	0
Total	7

**EPA CODE(s)**

UNK

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	0.32	0.24	0.00
	Other Materials	17.31	17.31	0.00
<b>Organics</b>	Celulosics	918.75	63.03	0.00
	Rubber	212.02	19.18	0.00
	Plastics	1060.10	191.83	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 9, 16, 17, 21, 22, 23

**Information Only**

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W332	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNKNOWN (TRU): SOLIDIFIED SOLUTIONS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3150	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

IDC's  
 Site ID-EGG-288T-204  
 Assigned BC-204

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

**EPA CODE(s)**

UNK

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1102.40	1102.40	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22

Information Only

315

29-Jun-94

DATABASE WS ID	IN-W334	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNKNOWN (TRU): PAPER, METALS, GLASS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5000	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

**IDC's**

Site	ID-EGG-288T-203
Assigned	OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	6
Projected	0
<b>Total</b>	<b>6</b>

**EPA CODE(s)**

UNK
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WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 21, 22, 23, 26

316



# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W336	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNKNOWN (TRU): COMBUSTIBLE SOLIDS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5300	WIPP PART B APPLICATION	COMBUSTIBLES (UNSPECIFIED)	
	- Group	Combustible Waste	TRUCON	Information Incomplete	

**IDC's**  
 Site: ID-EGG-288T-202  
 Assigned: RF-831

**WASTE VOLUMES (cu. m.)**

Retrievable	4
Projected	0
Total	4

**EPA CODE(s)**

UNK

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	4.23	1.10	0.00
	<b>Organics</b>			
	Celulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 21, 22, 23, 26

29-Jun-94

DATABASE WS ID	IN-W337	HANDLING	RH	FIELD OFFICE	Idaho
WS NAME	UNKNOWN (TRU): AMERICIUM SOLIDS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	8200	WIPP PART B APPLICATION	Information Incomplete		
- Group	Unknown Waste	TRUCON	Information Incomplete		

Site **IDC's**  
 ID-EGG-288T-200  
 Assigned UNK

WASTE VOLUMES (cu. m.)

Retrievable	0
Projected	0
Total	0

EPA CODE(s)  
 UNK

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics	Celulosics		
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 21, 22, 23, 26

Information Only

318

29-Jun-94

<b>DATABASE WS ID</b>	IN-W338	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	UNKNOWN (TRU): ANL-W ANALYTICAL CHEMISTRY LABORATORY COLD-LINE ABSORBED LIQUID, MI				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	8200	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Unknown Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site ID-EGG-288T-163

Assigned UNK

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

**EPA CODE(s)**

UNK

<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 21, 22, 23, 26

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W339	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	UNKNOWN (TRU): ANL-W FMF EFL ZR-U FUEL CASTING ALLOYS RESIDUES				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	8200	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Unknown Waste		TRUCON	Information Incomplete

**IDC's**

Site: ID-EGG-288T-162

Assigned: UNK

**WASTE VOLUMES (cu. m.)**

Retrievable	9
Projected	0
Total	9

**EPA CODE(s)**

UNK

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
Rubber				
Plastics				
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 21, 22, 23, 26

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29-Jun-94

DATABASE WS ID	IN-W341	HANDLING	RH	FIELD OFFICE	Idaho
WS NAME	UNKNOWN (TRU): ANL-W HFEF ANALYTICAL CHEMISTRY AND METALLOGRAPHIC COMBUSTIBLES				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	8200	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Unknown Waste		TRUCON	Information Incomplete

**IOC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

<u>WASTE PARAMETERS (kg/m3)</u>		<u>Max</u>	<u>Avg</u>	<u>Min</u>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes:

29-Jun-94

<b>DATABASE WS ID</b>	IN-W342	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	UNKNOWN (TRU): MISCELLANEOUS SOURCES				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	8200	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Unknown Waste	<b>TRUCON</b>	Information Incomplete		

**DC's**

Site ID-EGG-288T-157

Assigned UNK

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

UNK

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 21, 22, 23, 26

**Information Only**

302

**WASTE STREAM PROFILES (CONTINUED)** CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

<b>DATABASE WS ID</b>	IN-W345	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	UNKNOWN (TRU): TRU SCRAP				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	5000	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Heterogeneous Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site ID-EGG-288T-155

Assigned OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	15
Projected	0
<b>Total</b>	<b>15</b>

**EPA CODE(s)**

UNK

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 9, 16, 17, 21, 22, 23

29-Jun-94

<b>DATABASE WS ID</b>	IN-W347	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	UNKNOWN (TRU): ABSORBED LIQUIDS				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	3113	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**IDC's**

Site ID-EGG-288T-102

Assigned AE-131

**WASTE VOLUMES (cu. m.)**

Retrievable	54
Projected	0
Total	54

**EPA CODE(s)**

UNK

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	461.54	418.27	370.19
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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**Footnotes:** 16, 17, 21, 22, 23



29-Jun-94

DATABASE WS ID	IN-W349	HANDLING/RH	FIELD OFFICE	Idaho
WS NAME	UNKNOWN (TRU): TRU-REMOTE HANDLED WASTE			
NO MIGRATION VARIANCE PETITION	Information Incomplete			
WASTE MATRIX CODE	- Site	8200	WIPP PART B APPLICATION	Information Incomplete
	- Group	Unknown Waste	TRUCON	Information Incomplete

IDC's  
 Site ID-EGG-288T-107  
 Assigned UNK

**WASTE VOLUMES (cu. m.)**

Retrievable	6
Projected	0
Total	6

EPA CODE(s)  
 UNK

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics	Celulosics		
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 21, 22, 23, 26

29-Jun-94

<b>DATABASE WS ID</b>	IN-W350	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	UNKNOWN (TRU): SPECIAL SOURCE MATERIAL				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	8200	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Unknown Waste		TRUCON	Information Incomplete

**IDC's**

Site ID-EGG-288T-106

Assigned UNK

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

UNK

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 21, 22, 23, 26

**Information Only**

326

29-Jun-94

<b>DATABASE WS ID</b>	IN-W351	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	UNKNOWN (TRU): EMPTY BOTTLES				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	5000	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Heterogeneous Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

**EPA CODE(s)**

<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	14.42	4.81	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	19.23	4.81	0.00
<b>Organics</b>	Celulosics	458.65	287.69	43.27
	Rubber	8.65	3.27	0.00
	Plastics	60.58	35.96	1.44
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**Footnotes:**

307

# WASTE STREAM PROFILES (CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W354	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	SALTS (TRU): GIBSON SALTS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3140	WIPP PART B APPLICATION	Not Applicable	
	- Group	Salt Waste	TRUCON	Information Incomplete	

**IDC's**

Site: ID-EGG-146TN-412

Assigned: RF-411

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

NA

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	101.57	101.57	0.00
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 17, 17, 21, 22, 27

Information Only

29-Jun-94

<b>DATABASE WS ID</b>	IN-W355	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	SALTS (TRU): ELECTROREFINING SALT				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	3140	<b>WIPP PART B APPLICATION</b>	Not Applicable	
	- Group	Salt Waste	<b>TRUCON</b>	Information Incomplete	

**IDC's**

Site ID-EGG-146TN-411

Assigned RF-411

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
<b>Total</b>	<b>1</b>

**EPA CODE(s)**

NA

<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	101.57	101.57	0.00
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 14, 17, 21, 22, 27

**Information Only**

29-Jun-94

DATABASE WS ID	IN-W356	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	SALTS (TRU): MOLTEN SALTS-30% PULVERIZED				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3140	WIPP PART B APPLICATION	Not Applicable	
	- Group	Salt Waste	TRUCON	Information Incomplete	

ERC's

Site ID-EGG-146TN-410

Assigned RF-411

WASTE VOLUMES (cu. m.)

Retrievable	5
Projected	0
Total	5

EPA CODE(s)

NA

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	101.57	101.57	0.00
Organics	Celulosics			
	Rubber			
Solidified	Plastics			
	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 14, 17, 21, 22, 27

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W357	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	PARTICULATE WASTES (TRU): FLUID BED ASH				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	3111	WIPP PART B APPLICATION	Not Applicable	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**IDC's**  
 Site   
 Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes:

Information Only

29-Jun-94

DATABASE WS ID	IN-W358	HANDLING	RH	FIELD OFFICE	Idaho
WS NAME	RADIOACTIVE SOURCES (TRU): PU NEUTRON SOURCES				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5000	WIPP PART B APPLICATION	Not Applicable	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	5
Projected	0
Total	5

**EPA CODE(s)**

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes:

Information Only



# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W359	HANDLING	RH	FIELD OFFICE	Idaho
WS NAME	RADIOACTIVE SOURCES (TRU): NEUTRON SOURCES				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	8200	WIPP PART B APPLICATION	Not Applicable	
	- Group	Unknown Waste		TRUCON	Information Incomplete

DC's  
 Site   
 Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

EPA CODE(s)

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes:

## Information Only

29-Jun-94

<b>DATABASE WS ID</b>	IN-W360	<b>HANDLING</b>	RH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	RADIOACTIVE SOURCES (TRU): MISCELLANEOUS SOURCES				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	8200	<b>WIPP PART B APPLICATION</b>	Not Applicable		
<b>- Group</b>	Unknown Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site ID-EGG-144TN-012

Assigned UNK

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

NA

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 14, 17, 21, 22, 27

324

29-Jun-94

DATABASE WS ID	IN-W361	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	PARTICULATE WASTES (TRU): SOOT				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3111	WIPP PART B APPLICATION	Not Applicable		
- Group	Solidified Inorganic Waste	TRUCON	Information Incomplete		

**EC's**

Site ID-EGG-141TN-422

Assigned RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	5
Projected	0
Total	5

EPA CODE(s)

NA

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 3, 8, 14, 17, 21, 22, 27

29-Jun-94

DATABASE WS ID	IN-W362	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	PARTICULATE WASTE (TRU): ASH HEELS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3111	WIPP PART B APPLICATION	Not Applicable		
- Group	Solidified Inorganic Waste	TRUCON	Information Incomplete		

**IDC's**

Site ID-EGG-141TN-421

Assigned RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	21
Projected	0
Total	21

**EPA CODE(s)**

NA

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 3, 8, 14, 17, 21, 22, 27

334

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W363	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	PARTICULATE WASTES (TRU): VIRGIN INCINERATOR ASH				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3111	WIPP PART B APPLICATION	Not Applicable		
- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete	

**IDC's**  
 Site ID-EGG-141TN-420  
 Assigned RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	0
Total	2

**EPA CODE(s)**  
 NA

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 3, 14, 17, 21, 22, 27

**WASTE STREAM PROFILES** (CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

<b>DATABASE WS ID</b>	IN-W364	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	NONMETAL MOLDS AND CRUCIBLES (TRU): SAND, SLAG, AND CRUCIBLE				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b> - Site	3000	<b>WIPP PART B APPLICATION</b>	Not Applicable		
- Group	Solidified Organic Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site ID-EGG-137TN-392

Assigned RF-806.1

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

**EPA CODE(s)**

NA

<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	2012.02	625.00	164.90
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 14, 17, 21, 22, 27

**Information Only**

**WASTE STREAM PROFILES (CONTINUED)** CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W365	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	NONMETAL MOLDS AND CRUCIBLES (TRU); CRUCIBLES AND SAND				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3000	WIPP PART B APPLICATION	Not Applicable		
- Group	Solidified Organic Waste	TRUCON	Information Incomplete		

IDC's  
 Site ID-EGG-137TN-391  
 Assigned RF-806.1

**WASTE VOLUMES (cu. m.)**

Retrievable	5
Projected	0
Total	5

**EPA CODE(s)**

NA

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	2012.02	625.00	164.90
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 14, 17, 21, 22, 27

**Information Only**

**WASTE STREAM PROFILES (CONTINUED)** CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W366	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	NONMETAL MOLDS AND CRUCIBLES (TRU): LECO CRUCIBLES				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3000	WIPP PART B APPLICATION	Not Applicable		
- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete	

**IDC's**

Site	ID-EGG-137TN-370
Assigned	RF-370

**WASTE VOLUMES (cu. m.)**

Retrievable	3
Projected	0
Total	3

**EPA CODE(s)**

NA

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	528.85	528.85	0.00
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 14, 17, 21, 22, 27

Information Only

370



# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	IN-W367	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	NONMETAL MOLDS AND CRUCIBLES (TRU): GRAPHITE HEELS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5340	WIPP PART B APPLICATION	Not Applicable	
	- Group	Graphite Waste	TRUCON	Information Incomplete	

QC's

Site ID-EGG-137TN-311

Assigned RF-303

**WASTE VOLUMES (cu. m.)**

Retrievable	4
Projected	0
Total	4

EPA CODE(s)

NA

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	1673.08	115.38	0.00
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 14, 17, 21, 22, 27

Information Only

29-Jun-94

<b>DATABASE WS ID</b>	IN-W368	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	NONMETAL MOLDS AND CRUCIBLES (TRU): GRAPHITE SCARFINGS				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	5340	<b>WIPP PART B APPLICATION</b>	Not Applicable	
	- Group	Graphite Waste	<b>TRUCON</b>	Information Incomplete	

**IDC's**

Site ID-EGG-137TN-310

Assigned RF-303

**WASTE VOLUMES (cu. m.)**

Retrievable	3
Projected	0
Total	3

**EPA CODE(s)**

NA

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	1673.08	115.38	0.00
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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**Footnotes:** 14, 17, 21, 22, 27

**Information Only**

5/16

29-Jun-94

DATABASE WS ID	IN-W369	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	NONMETAL MOLDS AND CRUCIBLES (TRU): SCARFED GRAPHITE CHUNKS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5340	WIPP PART B APPLICATION	Not Applicable	
	- Group	Graphite Waste	TRUCON	Information Incomplete	

IDC's

Site ID-EGG-137TN-303

Assigned RF-303

WASTE VOLUMES (cu. m.)

Retrievable	12
Projected	0
Total	12

EPA CODE(s)

NA

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	1673.08	115.38	0.00
Organics	Celulosics			
	Rubber			
Solidified	Plastics			
	Organic Matrix			
Soils	Inorganic Matrix			
	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 14, 17, 21, 22, 27

29-Jun-94

<b>DATABASE WS ID</b>	IN-W370	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	NONMETAL MOLDS AND CRUCIBLES (TRU): GRAPHITE WASTE				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	5340	<b>WIPP PART B APPLICATION</b>	Not Applicable	
	- Group	Graphite Waste	<b>TRUCON</b>	Information Incomplete	

**IDC's**

Site **ID-EGG-137TN-115**

Assigned **RF-303**

**WASTE VOLUMES (cu. m.)**

Retrievable	67
Projected	0
Total	67

**EPA CODE(s)**

NA

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	1673.08	115.38	0.00
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 14, 17, 21, 22, 27

**Information Only**

344

29-Jun-94

DATABASE WS ID	IN-W371	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	METALS (TRU): ZINC MAGNESIUM ALLOY METAL				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5100	WIPP PART B APPLICATION	Not Applicable		
- Group	Unspecified Metal Waste		TRUCON	Information Incomplete	

IDC's

Site ID-EGG-132TN-416

Assigned RF-480

WASTE VOLUMES (cu. m.)

Retrievable	0
Projected	0
Total	0

EPA CODE(s)

NA

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
Organics	Celulosics	45.27	7.43	0.00
	Rubber			
Solidified	Plastics	67.57	15.09	0.00
	Organic Matrix			
Soils	Inorganic Matrix			
	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 14, 17, 21, 22, 27

29-Jun-94

DATABASE WS ID	IN-W372	HANDLING	RH	FIELD OFFICE	Idaho
WS NAME	METALS (TRU): MET SAMPLES FISSILE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	8200	WIPP PART B APPLICATION	Not Applicable		
- Group	Unknown Waste	TRUCON	Information Incomplete		

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	4
Projected	0
Total	4

**EPA CODE(s)**

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes:

29-Jun-94

<b>DATABASE WS ID</b>	IN-W373	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	FILTERS (TRU): INSULATION HEELS				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	3000	<b>WIPP PART B APPLICATION</b>	Not Applicable		
<b>- Group</b>	Solidified Inorganic Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site ID-EGG-118TN-361

Assigned RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

NA

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 14, 17, 21, 22, 27

29-Jun-94

<b>DATABASE WS ID</b>	IN-W374	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Idaho
<b>WS NAME</b>	CONCRETE - BRICK (TRU): CONCRETE, ASPHALT, ETC.				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	5210	<b>WIPP PART B APPLICATION</b>	Not Applicable		
<b>- Group</b>	Inorganic Non-metal Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site ID-EGG-115TN-960

Assigned RF-374

**WASTE VOLUMES (cu. m.)**

Retrievable	10
Projected	0
Total	10

**EPA CODE(s)**

NA

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	3072.12	584.13	0.00
	<b>Organics</b>			
	Celulosics	12.02	12.02	0.00
	Rubber			
	Plastics	12.02	12.02	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil	144.23	64.90	0.00
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 14, 17, 21, 22, 27

2/18



# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	KA-T01	HANDLING	CH	FIELD OFFICE	Naval Reacto
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	WIPP PART B APPLICATION		Not Applicable	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

**IDC's**

Site	Not Reported
Assigned	OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	0
<b>Total</b>	<b>2</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>			
	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 17, 21, 22, 27

Information Only

29-Jun-94

DATABASE WS ID	KA-W016	HANDLING	RH	FIELD OFFICE	Naval Reacto
WS NAME	TRANSURANIC DEBRIS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5000	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste		TRUCON	Information Incomplete	

**IDC's**

Site	Not Reported
Assigned	OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	11
Projected	25
<b>Total</b>	<b>36</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes:

Information Only

350

29-Jun-94

DATABASE WS ID	LA-T01	HANDLING	CH	FIELD OFFICE	Albuquerque
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	WIPP PART B APPLICATION		Not Applicable	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**IDC's**

Site	Not Reported
Assigned	LA-003

**WASTE VOLUMES (cu. m.)**

Retrievable	1745
Projected	9731
<b>Total</b>	<b>11476</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1105.77	1004.81	759.62
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>			
	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 17, 21, 22, 27

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	LA-T02	HANDLING	RH	FIELD OFFICE	Albuquerque
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	WIPP PART B APPLICATION		Not Applicable	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

**IDC's**

Site	Not Reported
Assigned	OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	78
Projected	930
<b>Total</b>	<b>1008</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>	Steel		141.83
		Plastic		39.42

**These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.**

Footnotes: 15, 17, 21, 22, 27

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	LA-T03	HANDLING	CH	FIELD OFFICE	
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	WIPP PART B APPLICATION		Not Applicable	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

**IDC's**

Site	Not Reported
Assigned	OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	582
Projected	3244
<b>Total</b>	<b>3825</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>	Steel		141.83
Plastic			39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 17, 21, 22, 27

Information Only

29-Jun-94

<b>DATABASE WS ID</b>	LA-W034	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Albuquerque
<b>WS NAME</b>	SCRAP METAL - SODIUM				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	6290	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**IDC's**

Site: Not Reported

Assigned: LA-002

**WASTE VOLUMES (cu. m.)**

Retrievable	110
Projected	18
<b>Total</b>	<b>128</b>

**EPA CODE(s)**

D003D

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	736.84	736.84	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 7, 16, 17, 21, 22, 23,

# WASTE STREAM PROFILES (CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	LA-W035	HANDLING	CH	FIELD OFFICE	Albuquerque
WS NAME	DEBRIS-BARIUM	NO MIGRATION VARIANCE PETITION			
		Information Incomplete			
WASTE MATRIX CODE	- Site	5190	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Unspecified Metal Waste		TRUCON	Information Incomplete

**IDC's**  
 Site  Not Reported  
 Assigned  LA-005

**WASTE VOLUMES (cu. m.)**

Retrievable	15
Projected	0
Total	15

**EPA CODE(s)**  
 D005A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	931.37	254.42	0.00
	Aluminum-Based Metals/Alloys	9.86	2.69	0.00
	Other Metals	44.45	12.14	0.00
	Other Materials	5.29	0.96	0.00
Organics	Celulosics	0.12	0.06	0.00
	Rubber	180.31	88.71	0.00
	Plastics	0.02	0.01	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes:  16, 17, 21, 22, 23

29-Jun-94

DATABASE WS ID	LA-W036	HANDLING	CH	FIELD OFFICE	Albuquerque
WS NAME	PROCESS RESIDUE - CHROMIUM/LEAD				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	9100	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Inorganic Waste	TRUCON	Information Incomplete		

**IDC's**  
 Site   
 Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	116
Projected	2
Total	118

**EPA CODE(s)**

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics			
Solidified	Celulosics			
	Rubber			
Soils	Plastics			
	Soil			
Packaging Materials	Organic Matrix			
	Inorganic Matrix	1288.27	1226.73	1216.15
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes:



# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	LA-W037	HANDLING	CH	FIELD OFFICE	Albuquerque
WS NAME	LEAD SHIELDING AND DEBRIS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5120	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Lead/Cadmium Metal Waste		TRUCON	Information Incomplete

DC's

Site Not Reported

Assigned RF-321

**WASTE VOLUMES (cu. m.)**

Retrievable	2051
Projected	1824
<b>Total</b>	<b>3874</b>

EPA CODE(s)

D008C

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

29-Jun-94

<b>DATABASE WS ID</b>	LA-W038	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Albuquerque
<b>WS NAME</b>	CEMENTED PROCESS SLUDGE, DEBRIS - LEAD				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	9100	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Solidified Inorganic Waste	<b>TRUCON</b>	Information Incomplete	

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	15
Projected	127
Total	143

**EPA CODE(s)**

<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1288.27	1226.73	1216.15
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes:

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	LA-W039	HANDLING	CH	FIELD OFFICE	Albuquerque
WS NAME	DECONTAMINATION WASTE - F001, F002				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5490	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste		TRUCON	Information Incomplete	

**IDC's**  
 Site   
 Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	276
Projected	1433
Total	1710

**EPA CODE(s)**

F002
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	0.04	0.04	0.00
	Aluminum-Based Metals/Alloys	0.36	0.36	0.00
	Other Metals	18.18	18.18	0.00
	Other Materials	6.84	6.84	0.00
	Organics	Celulosics	68.70	62.07
Rubber		1.16	1.05	0.00
Plastics		5.72	5.17	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22, 23

Information Only

29-Jun-94

<b>DATABASE WS ID</b>	LA-W040	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Albuquerque
<b>WS NAME</b>	CEMENTED PROCESS SLUDGE - CR, SOLVENTS				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	9100	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**DC's**

Site  Not Reported

Assigned  LA-003

**WASTE VOLUMES (cu. m.)**

Retrievable	184
Projected	230
Total	414

**EPA CODE(s)**

F005A
F001
F002
D007A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1105.77	1004.81	759.62
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 2, 16, 17, 21, 22, 23

**Information Only**

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	LA-W041	HANDLING	CH	FIELD OFFICE	Albuquerque
WS NAME	DEWATERED TREATMENT SLUDGES - F001,2,5				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	9100	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**IDC's**  
 Site: Not Reported  
 Assigned: LA-003

**WASTE VOLUMES (cu. m.)**

Retrievable	1088
Projected	0
Total	1088

**EPA CODE(S)**

F001
F005A
F002

**WASTE PARAMETERS (kg/m3)**

		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1105.77	1004.81	759.62
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 2, 16, 17, 21, 22, 23

Information Only

29-Jun-94

DATABASE WS ID	LA-W042	HANDLING	CH	FIELD OFFICE	Albuquerque
WS NAME	LEAD WASTE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5120	WIPP PART B APPLICATION	Information Incomplete		
- Group	Lead/Cadmium Metal Waste	TRUCON	Information Incomplete		

IDC's

Site Not Reported

Assigned RF-321

WASTE VOLUMES (cu. m.)

Retrievable	159
Projected	0
Total	159

EPA CODE(s)

D008C

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
Organics	Celulosics			
	Rubber			
Solidified	Plastics			
	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

Information Only

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	LA-W043	HANDLING	CH	FIELD OFFICE	Albuquerque
WS NAME	DECONTAMINATION WASTE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5490	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste		TRUCON	Information Incomplete	

**IDC's**

Site	Not Reported
Assigned	LA-001

**WASTE VOLUMES (cu. m.)**

Retrievable	1184
Projected	0
Total	1184

**EPA CODE(s)**

F002
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	0.04	0.04	0.00
	Aluminum-Based Metals/Alloys	0.36	0.36	0.00
	Other Metals	18.18	18.18	0.00
	Other Materials	6.84	6.84	0.00
	Organics	Celulosics	68.70	62.07
Rubber		1.16	1.05	0.00
Plastics		5.72	5.17	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

Information Only

29-Jun-94

<b>DATABASE WS ID</b>	LA-W044	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Albuquerque
<b>WS NAME</b>	CEMENTED PROCESS SLUDGE				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	9100	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Solidified Inorganic Waste		<b>TRUCON</b>	Information Incomplete	

**IDC's**

**Site** Not Reported

**Assigned** LA-003

**WASTE VOLUMES (cu. m.)**

Retrievable	2868
Projected	0
<b>Total</b>	<b>2868</b>

**EPA CODE(s)**

D007A
F005A
F002
F001

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1105.77	1004.81	759.62
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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**Footnotes:** 2, 16, 17, 21, 22, 23



29-Jun-94

DATABASE WS ID	LA-W045	HANDLING	CH	FIELD OFFICE	Albuquerque
WS NAME	DEWATERED TREATMENT SLUDGES				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	9100	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**IDC's**

Site: Not Reported

Assigned: LA-003

**WASTE VOLUMES (cu. m.)**

Retrievable	148
Projected	0
Total	148

**EPA CODE(s)**

F001
F002
F005A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics			
	Celulosics			
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix	1105.77	1004.81	759.62
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 2, 16, 17, 21, 22, 23

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	LB-T01	HANDLING	CH	FIELD OFFICE	San Francisc
WS NAME	NON MIXED TRU				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	WIPP PART B APPLICATION		Not Applicable	
	- Group	Unknown Waste		TRUCON	Information Incomplete

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	2
Total	2

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by porportioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes:

## Information Only

E-167

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# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	LL-T01	HANDLING	CH	FIELD OFFICE	Oakland
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable		
- Group	Solidified Inorganic Waste	TRUCON	Information Incomplete		

**IDC's**

Site: Not Reported

Assigned: UNK

**WASTE VOLUMES (cu. m.)**

Retrievable	111
Projected	810
Total	920

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics	Celulosics		
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

29-Jun-94

<b>DATABASE WS ID</b>	LL-T02	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Oakland
<b>WS NAME</b>	NON MIXED TRU DERIVED FROM IDB				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>		<b>WIPP PART B APPLICATION</b>	Not Applicable		
<b>- Group</b>	Heterogeneous Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

**Site** Not Reported

**Assigned** UNK

**WASTE VOLUMES (cu. m.)**

Retrievable	111
Projected	810
Total	920

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**These are not actual site-generated waste streams.** The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

**Footnotes:** 15, 18, 21, 22, 27

29-Jun-94

DATABASE WS ID	LL-W018	HANDLING	CH	FIELD OFFICE	Oakland
WS NAME	TRU MIXED INORGANIC METAL				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5120	WIPP PART B APPLICATION	Information Incomplete		
- Group	Lead/Cadmium Metal Waste	TRUCON	Information Incomplete		

IDC's

Site	Not Reported
Assigned	RF-480

WASTE VOLUMES (cu. m.)

Retrievable	1
Projected	28
Total	29

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
Organics	Celulosics	45.27	7.43	0.00
	Rubber			
	Plastics	67.57	15.09	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

29-Jun-94

DATABASE WS ID	LL-W019	HANDLING	CH	FIELD OFFICE	Oakland
WS NAME	TRU MIXED HALOGENATED SOLVENTS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	2110	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Organic Waste		TRUCON	Information Incomplete	

**IDC's**  
 Site   
 Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	21
Total	22

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics			
Solidified	Celulosics			
	Rubber			
Soils	Plastics			
	Soil			
Packaging Materials	Organic Matrix	1134.62	923.08	350.96
	Inorganic Matrix			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes:

Information Only

370

29-Jun-94

<b>DATABASE WS ID</b>	LL-W020	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Oakland
<b>WS NAME</b>	TRU MIXED SULFURIC ACID				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	1210	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Solidified Inorganic Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

**Site** Not Reported

**Assigned** RF-800

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	42
<b>Total</b>	<b>44</b>

<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**Footnotes:** 1, 8, 16, 17, 21, 22, 23

**Information Only**

E - 172

29-Jun-94

<b>DATABASE WS ID</b>	MD-T01	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Albuquerque
<b>WS NAME</b>	NON MIXED TRU DERIVED FROM IDB				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>		<b>WIPP PART B APPLICATION</b>	Not Applicable		
<b>- Group</b>	Solidified Inorganic Waste		<b>TRUCON</b>	Information Incomplete	

**IDC's**

<b>Site</b>	Not Reported
<b>Assigned</b>	RF-801

**WASTE VOLUMES (cu. m.)**

<b>Retrievable</b>	85
<b>Projected</b>	29
<b>Total</b>	113

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	1134.62	923.08	350.96
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

**Footnotes:** 15, 17, 18, 21, 22, 27

**Information Only**

378



# WASTE STREAM PROFILES (CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	MD-T02	HANDLING	CH	FIELD OFFICE	Albuquerque
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	WIPP PART B APPLICATION		Not Applicable	
	- Group	Combustible Waste		TRUCON	Information Incomplete

**IDC's**

Site	Not Reported
Assigned	RF-321

**WASTE VOLUMES (cu. m.)**

Retrievable	57
Projected	28
<b>Total</b>	<b>85</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
<b>Solidified</b>	Plastics			
	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 17, 18, 21, 22, 27

29-Jun-94

<b>DATABASE WS ID</b>	MD-W002	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Albuquerque
<b>WS NAME</b>	CORROSIVES - TRU				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	3113	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Solidified Inorganic Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site MD-833

Assigned MD-836

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	0
Total	2

**EPA CODE(s)**

D002B
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<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	630.29	630.29	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

**Information Only**

E-175

374

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	MD-W003	HANDLING	CH	FIELD OFFICE	Albuquerque
WS NAME	LEAD - TRU				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5311	WIPP PART B APPLICATION	Information Incomplete		
- Group	Combustible Waste	TRUCON	Information Incomplete		

**IDC's**  
 Site MD-835  
 Assigned RF-339

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

**EPA CODE(s)**

D008A

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	504.81	254.81	0.00
	Other Materials	144.23	28.85	0.00
	<b>Organics</b>			
	Celulosics	10.10	5.77	0.00
	Rubber	464.42	265.38	0.00
	Plastics	30.29	17.31	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22, 23

Information Only

29-Jun-94

<b>DATABASE WS ID</b>	MU-W002	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Oakland
<b>WS NAME</b>	Mixed TRU Waste				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	5400	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Heterogeneous Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	1

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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**Footnotes:**

**Information Only**

29-Jun-94

<b>DATABASE WS ID</b>	NT-W001	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Nevada
<b>WS NAME</b>	NTS STORED, TRU WASTE FROM LLNL				
<b>NO MIGRATION VARIANCE PETITION</b>	NT 111, NT 211				
<b>WASTE MATRIX CODE - Site</b>	5400	<b>WIPP PART B APPLICATION</b>	NR		
<b>- Group</b>	Heterogeneous Waste	<b>TRUCON</b>	NT 111, NT 211		

**IDC's**

Site LL-002

Assigned OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	612
Projected	0
<b>Total</b>	<b>612</b>

**EPA CODE(s)**

D001A
CA352
CA352
CA352
CA352
CA181
CA181
CA181
CA181
CA181
CA181
D001C
P015
D001A
D002B
D003D
D006A
D008C
D007A
D011A
F001
F001
F001
F002
F003
CA181

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>	Steel	141.83	
	Plastic		39.42	

Footnotes: 16, 17, 23

**WASTE STREAM PROFILES (CONTINUED)**

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

<b>DATABASE WS ID</b>	OR-T01	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Oak Ridge
<b>WS NAME</b>	NON MIXED TRU DERIVED FROM IDB				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>		<b>WIPP PART B APPLICATION</b>	Not Applicable		
<b>- Group</b>	Solidified Inorganic Waste		<b>TRUCON</b>	Information Incomplete	

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	29
Projected	37
<b>Total</b>	<b>66</b>

<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes:

Information Only

E-179

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	OR-T02	HANDLING	RH	FIELD OFFICE	Oak Ridge
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable		
- Group	Unknown Waste		TRUCON	Information Incomplete	

**IDC's**

Site	Not Reported
Assigned	OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	44
Projected	49
<b>Total</b>	<b>93</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>			
	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 17, 18, 22, 27

## Information Only

29-Jun-94

<b>DATABASE WS ID</b>	OR-T03	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Oak Ridge
<b>WS NAME</b>	NON MIXED TRU DERIVED FROM IDB				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	<b>WIPP PART B APPLICATION</b>	Not Applicable		
	- Group	Heterogeneous Waste	<b>TRUCON</b>	Information Incomplete	

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	258
Projected	336
<b>Total</b>	<b>594</b>

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes:



29-Jun-94

DATABASE WS ID	OR-T04	HANDLING	RH	FIELD OFFICE	Oak Ridge
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable		
- Group	Heterogeneous Waste	TRUCON	Information Incomplete		

**IDC's**  
 Site   
 Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	36
Projected	40
Total	76

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	Organics	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
Solidified	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
Soils	Soil			
	Packaging Materials			
	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15,17, 18, 21, 22, 27

367

29-Jun-94

<b>DATABASE WS ID</b>	OR-W040	<b>HANDLING</b>	RH	<b>FIELD OFFICE</b>	Oak Ridge
<b>WS NAME</b>	RH-TRU Heterogeneous Debris				
<b>NO MIGRATION VARIANCE PETITION</b>	OR 125 (3)				
<b>WASTE MATRIX CODE - Site</b>	5400	<b>WIPP PART B APPLICATION</b>	NR		
<b>- Group</b>	Heterogeneous Waste		<b>TRUCON</b>	OR 125 (3)	

**IDC's**

Site 2039

Assigned OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	462
Projected	198
<b>Total</b>	<b>660</b>

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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**Footnotes:** 16, 17, 23, 25

**Information Only**

E-183

302

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

<b>DATABASE WS ID</b>	OR-W042	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Oak Ridge
<b>WS NAME</b>	Inactive Storage Tank Contents - MTRU Sludge				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	3120	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Solidified Inorganic Waste		<b>TRUCON</b>	Information Incomplete

**IDC's**

Site 2041

Assigned RF-800

**WASTE VOLUMES (cu. m.)**

Retrievable	110
Projected	0
<b>Total</b>	<b>110</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

Information Only

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	OR-W044	HANDLING	CH	FIELD OFFICE	Oak Ridge
WS NAME	CH-TRU Heterogeneous Debris				
NO MIGRATION VARIANCE PETITION	OR 125 (3)				
WASTE MATRIX CODE	- Site	5400	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Heterogeneous Waste		TRUCON	OR 125 (3)

**IDC's**

Site	2043
Assigned	OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	511
Projected	273
<b>Total</b>	<b>784</b>

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 23, 25

Information Only

E-185

384

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	OR-W045.1	HANDLING	CH	FIELD OFFICE	Oak Ridge
WS NAME	CH-TRU Uncategorized				
NO MIGRATION VARIANCE PETITION	OR 125 (3)				
WASTE MATRIX CODE - Site	8000	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Inorganic Waste		TRUCON	OR 125 (3)	

IDC's

Site 2044

Assigned OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	Organics	Celulosics	184.81	80.91
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
Solidified	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 23, 25

Information Only

385

29-Jun-94

<b>DATABASE WS ID</b>	OR-W045.2	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Oak Ridge
<b>WS NAME</b>	CH-TRU Uncategorized				
<b>NO MIGRATION VARIANCE PETITION</b>	OR 125				
<b>WASTE MATRIX CODE</b>	- Site	8000	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Heterogeneous Waste	<b>TRUCON</b>	OR 125	

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	<input type="text" value="5"/>
Projected	<input type="text" value="0"/>
Total	<input type="text" value="5"/>

<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**Footnotes:**

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	OR-W046	HANDLING	RH	FIELD OFFICE	Oak Ridge
WS NAME	Liquid Low Level Waste Storage Tanks - Sludge				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3000	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete	

**IDC's**  
 Site   
 Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	605
Projected	180
Total	785

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics			
Organics	Celulosics			
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes:

Information Only

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	OR-W047	HANDLING	CH	FIELD OFFICE	Oak Ridge
WS NAME	CH-TRU Heterogeneous Debris (With Liquids)				
NO MIGRATION VARIANCE PETITION	OR 125 (3)				
WASTE MATRIX CODE	- Site	5400	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Heterogeneous Waste		TRUCON	OR 125 (3)

**IDC's**

Site	2046
Assigned	OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	155
Projected	0
<b>Total</b>	<b>155</b>

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 23, 25

## Information Only



# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	PA-W014	HANDLING	CH	FIELD OFFICE	Oak Ridge
WS NAME	TRANSURANIC WASTE LIQUID				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	1200	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete	

DC's

Site 14

Assigned RF-800

**WASTE VOLUMES (cu. m.)**

Retrievable	19
Projected	0
Total	19

**EPA CODE(s)**

D007A
D002B

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics			
	Celulosics			
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 1, 8, 16, 17, 21, 22, 23

Information Only

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

<b>DATABASE WS ID</b>	PA-W015	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Oak Ridge
<b>WS NAME</b>	TRU AND TECHNETIUM WASTE				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	8200	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Unknown Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	6
Projected	0
Total	6

**EPA CODE(s)**

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes:

Information Only

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-T01	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site			WIPP PART B APPLICATION	Not Applicable	
- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete	

**IDC's**

Site	Not Reported
Assigned	RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	1258
Projected	1124
<b>Total</b>	<b>2382</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

## Information Only

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-T02	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable		
- Group	Unspecified Metal Waste	TRUCON	Information Incomplete		

<b>IDC's</b>	
Site	Not Reported
Assigned	RF-320

**WASTE VOLUMES (cu. m.)**

Retrievable	362
Projected	312
Total	674

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	317.31	83.65	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals	1586.54	195.19	0.00
	Other Materials	19.23	19.23	0.00
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.**

Footnotes: 15, 18, 21, 22, 27

Information Only

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-T03	HANDLING	CH
WS NAME	NON MIXED TRU DERIVED FROM IDB		
NO MIGRATION VARIANCE PETITION	Information Incomplete		
WASTE MATRIX CODE	- Site	WIPP PART B APPLICATION	Not Applicable
	- Group	Combustible Waste	TRUCON Information Incomplete

**IDC's**

Site	Not Reported
Assigned	RF-321

**WASTE VOLUMES (cu. m.)**

Retrievable	239
Projected	187
<b>Total</b>	<b>426</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

## Information Only

29-Jun-94

<b>DATABASE WS ID</b>	RF-T04	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Rocky Flats
<b>WS NAME</b>	NON MIXED TRU DERIVED FROM IDB				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>		<b>WIPP PART B APPLICATION</b>	Not Applicable		
<b>- Group</b>	Heterogeneous Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

<b>Site</b>	Not Reported
<b>Assigned</b>	RF-480

**WASTE VOLUMES (cu. m.)**

<b>Retrievable</b>	1256
<b>Projected</b>	1062
<b>Total</b>	2317

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	<b>Organics</b>	Celulosics	45.27	7.43
	Rubber			
	Plastics	67.57	15.09	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

**Footnotes:** 15, 18, 21, 22, 27

29-Jun-94

<b>DATABASE WS ID</b>	RF-T05	<b>HANDLING/CH</b>		<b>FIELD OFFICE</b>	Rocky Flats
<b>WS NAME</b>	NON MIXED TRU DERIVED FROM IDB				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>		<b>WIPP PART B APPLICATION</b>	Not Applicable		
<b>- Group</b>	Filter Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

<b>Site</b>	Not Reported
<b>Assigned</b>	RF-490

**WASTE VOLUMES (cu. m.)**

Retrievable	486
Projected	437
<b>Total</b>	<b>924</b>

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	429.82	429.82	0.00
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics	8.77	8.77	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-W008	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Soil & Cleanup Debris/TRM				
NO MIGRATION VARIANCE PETITION	RF 121				
WASTE MATRIX CODE - Site	5290	WIPP PART B APPLICATION	BENELEX AND PLEXIGLAS		
- Group	Inorganic Non-metal Waste		TRUCON	RF 121	

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	0
Total	2

**EPA CODE(s)**

F005A
F002
F001
D008A
D007A
D006A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	3072.12	584.13	0.00
<b>Organics</b>	Celulosics	12.02	12.02	0.00
	Rubber			
	Plastics	12.02	12.02	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil	144.23	64.90	0.00
	<b>Packaging Materials</b>	Steel		141.83
Plastic			39.42	

Footnotes:

Information Only



# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-W010	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Aqueous Sludge/TRM				
NO MIGRATION VARIANCE PETITION	RF 111				
WASTE MATRIX CODE - Site	3150	WIPP PART B APPLICATION	INORGANIC WASTE WATER TREA		
- Group	Solidified Inorganic Waste		TRUCON/RF 111		

**QC's**

Site	RF-800
Assigned	RF-800

**WASTE VOLUMES (cu. m.)**

Retrievable	143
Projected	14
<b>Total</b>	<b>157</b>

**EPA CODE(s)**

F001
F002
D006A
F001
F005A
F005A
D008A
F002

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16

# WASTE STREAM PROFILES

CAO-94-1005, Rev. 0  
(CONTINUED) June 1994

29-Jun-94

DATABASE WS ID	RF-W011	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Metal/TRM				
NO MIGRATION VARIANCE PETITION	RF 117				
WASTE MATRIX CODE - Site	5120	WIPP PART B APPLICATION	METAL		
- Group	Lead/Cadmium Metal Waste		TRUCON	RF 117	

**IDC's**  
 Site RF-480  
 Assigned RF-480

**WASTE VOLUMES (cu. m.)**

Retrievable	73
Projected	45
Total	118

**EPA CODE(s)**

F002
F002
F001
F001
D008C

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	<b>Organics</b>	Celulosics	45.27	7.43
Rubber				
<b>Solidified</b>	Plastics	67.57	15.09	0.00
	Organic Matrix			
<b>Soils</b>	Inorganic Matrix			
	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 24

Information Only

# WASTE STREAM PROFILES (CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-W012	HANDLING/CH	FIELD OFFICE
WS NAME	Combustibles/TRM		Rocky Flats
NO MIGRATION VARIANCE PETITION	RF 116		
WASTE MATRIX CODE - Site	5440	WIPP PART B APPLICATION	COMBUSTIBLES
- Group	Heterogeneous Waste	TRUCON	RF 116

**IDC's**

Site RF-831

Assigned RF-831

**WASTE VOLUMES (cu. m.)**

Retrievable	237
Projected	124
<b>Total</b>	<b>361</b>

**EPA CODE(s)**

F002
F001
F002
F005A
F005A
F001

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	4.23	1.10	0.00
	<b>Organics</b>			
	Celulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>			
	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 24

29-Jun-94

DATABASE WS ID	RF-W013	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Solidified Organics/TRM				
NO MIGRATION VARIANCE PETITION	RF 112				
WASTE MATRIX CODE - Site	3150	WIPP PART B APPLICATION	ORGANIC LIQUID/SLUDGE		
- Group	Solidified Organic Waste		TRUCON/RF 112		

IDC's

Site RF-801

Assigned RF-801

WASTE VOLUMES (cu. m.)

Retrievable	111
Projected	10
Total	121

EPA CODE(s)

F002
F002
F001
F001

WASTE PARAMETERS (kg/m<sup>3</sup>)

		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics			
Organics	Celulosics			
	Rubber			
Solidified	Plastics			
	Organic Matrix	1134.62	923.08	350.96
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 19

Information Only

E-201

400

29-Jun-94

<b>DATABASE WS ID</b>	RF-W026	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Rocky Flats
<b>WS NAME</b>	Used Absorbents/TRM				
<b>NO MIGRATION VARIANCE PETITION</b>	RF 122				
<b>WASTE MATRIX CODE - Site</b>	3119	<b>WIPP PART B APPLICATION</b>	FIREBRICK AND CERAMIC CRUCIB		
<b>- Group</b>	Heterogeneous Waste		TRUCON RF 122		

**IDC's**

Site RF-375

Assigned RF-375

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

F001
F001

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	4.81	4.81	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	961.54	557.69	216.35
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics	38.46	38.46	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16

29-Jun-94

<b>DATABASE WS ID</b>	RF-W028	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Rocky Flats
<b>WS NAME</b>	Lead/TRM				
<b>NO MIGRATION VARIANCE PETITION</b>	RF 117				
<b>WASTE MATRIX CODE - Site</b>	7200	<b>WIPP PART B APPLICATION</b>	METAL		
<b>- Group</b>	Lead/Cadmium Metal Waste		<b>TRUCON</b>	RF 117	

**IDC's**

Site RF-321

Assigned RF-321

**WASTE VOLUMES (cu. m.)**

Retrievable	4
Projected	3
Total	7

**EPA CODE(s)**

D008C

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
<b>Organics</b>	Other Materials			
	Celulosics			
	Rubber			
<b>Solidified</b>	Plastics			
	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16

29-Jun-94

DATABASE WS ID	RF-W029	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Leaded Gloves/TRM				
NO MIGRATION VARIANCE PETITION	RF 123				
WASTE MATRIX CODE - Site	5311	WIPP PART B APPLICATION	LEADED RUBBER		
- Group	Combustible Waste	TRUCON	RF 123		

Site **IDC's**  
RF-339  
Assigned RF-339

**WASTE VOLUMES (cu. m.)**

Retrievable	20
Projected	12
Total	32

EPA CODE(s)  
D008A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	504.81	254.81	0.00
	Other Materials	144.23	28.85	0.00
	<b>Organics</b>			
	Celulosics	10.10	5.77	0.00
	Rubber	464.42	265.38	0.00
	Plastics	30.29	17.31	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 24

29-Jun-94

<b>DATABASE WS ID</b>	RF-W032	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Rocky Flats
<b>WS NAME</b>	Ground Glass/TRM				
<b>NO MIGRATION VARIANCE PETITION</b>	RF 118				
<b>WASTE MATRIX CODE - Site</b>	3119	<b>WIPP PART B APPLICATION</b>	GLASS		
<b>- Group</b>	Inorganic Non-metal Waste		<b>TRUCON</b>	RF 118	

**DC's**

Site RF-444

Assigned RF-440

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	6
Total	8

**EPA CODE(s)**

D008A

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	290.75	290.75	0.00
<b>Organics</b>	Celulosics	1.10	1.10	0.00
	Rubber	1.10	1.10	0.00
	Plastics	19.82	19.82	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 19



# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-W036	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Firebrick, Pulverized or Fines/TRM				
NO MIGRATION VARIANCE PETITION	RF 122				
WASTE MATRIX CODE - Site	3119	WIPP PART B APPLICATION	FIREBRICK AND CERAMIC CRUCIB		
- Group	Heterogeneous Waste		TRUCON/RF 122		

DC's

Site RF-377

Assigned RF-377

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	1
Total	2

**EPA CODE(s)**

F002
D004A
D006A
D007A
D008A
F001
F002
F005A
F001

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	338.22	269.23	216.35
Organics	Celulosics	57.69	57.69	0.00
	Rubber			
Solidified	Plastics	38.46	38.46	0.00
	Organic Matrix			
Soils	Inorganic Matrix			
	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-W037	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Heavy Metal (non-SS)/TRM				
NO MIGRATION VARIANCE PETITION	RF 117				
WASTE MATRIX CODE	- Site	5190	WIPP PART B APPLICATION	METAL	
	- Group	Unspecified Metal Waste		TRUCON	RF 117

**DC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	5
Projected	0
Total	5

**EPA CODE(s)**

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	317.31	83.65	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals	1586.54	195.19	0.00
	Other Materials	19.23	19.23	0.00
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes:

Information Only

29-Jun-94

<b>DATABASE WS ID</b>	RF-W038	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Rocky Flats
<b>WS NAME</b>	Solidified Lab Waste/TRM				
<b>NO MIGRATION VARIANCE PETITION</b>	RF 113				
<b>WASTE MATRIX CODE - Site</b>	3150	<b>WIPP PART B APPLICATION</b>	SOLIDIFIED LIQUID		
<b>- Group</b>	Solidified Inorganic Waste		<b>TRUCON</b>	RF 113	

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	26
Total	28

**EPA CODE(s)**

<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	1418.27	1201.92	519.23
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes:

29-Jun-94

DATABASE WS ID	RF-W040	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Incinerator Ash/TRM				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3111	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Inorganic Waste	TRUCON	Information Incomplete		

**IDC's**  
 Site Not Reported  
 Assigned RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	1202
Projected	0
Total	1202

**EPA CODE(s)**

D011A
D005A
D006A
D004A
D007A
D008A
D009A
D010A
F001
F002
F002
F001
F005A

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics			
Organics	Celulosics			
	Rubber			
Solidified	Plastics			
	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 3, 6, 8, 16, 21, 22, 23, 24

29-Jun-94

<b>DATABASE WS ID</b>	RF-W041	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Rocky Flats
<b>WS NAME</b>	Leaded Gloves-Acid Contaminated/TRM				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	5311	<b>WIPP PART B APPLICATION</b>	LEADED RUBBER (UNSPECIFIED)		
<b>- Group</b>	Combustible Waste	<b>TRUCON</b>	Information Incomplete		

**DC's**

Site RF-341

Assigned RF-339

**WASTE VOLUMES (cu. m.)**

Retrievable	28
Projected	9
<b>Total</b>	<b>37</b>

**EPA CODE(s)**

D008A

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	504.81	254.81	0.00
	Other Materials	144.23	28.85	0.00
	<b>Organics</b>	Celulosics	10.10	5.77
	Rubber	464.42	265.38	0.00
	Plastics	30.29	17.31	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 21, 22

29-Jun-94

DATABASE WS ID	RF-W052	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Glass/TRM				
NO MIGRATION VARIANCE PETITION	RF 118				
WASTE MATRIX CODE - Site	5220	WIPP PART B APPLICATION	GLASS		
- Group	inorganic Non-metal Waste		TRUCON	RF 118	

**IDC's**  
 Site RF-440  
 Assigned RF-440

**WASTE VOLUMES (cu. m.)**

Retrievable	15
Projected	4
<b>Total</b>	<b>18</b>

**EPA CODE(s)**

F001
D005A
F001
F002
F002
D008A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	290.75	290.75	0.00
	<b>Organics</b>			
	Celulosics	1.10	1.10	0.00
	Rubber	1.10	1.10	0.00
	Plastics	19.82	19.82	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 24

29-Jun-94

DATABASE WS ID	RF-W056	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Mg Oxide Crucibles/TRM				
NO MIGRATION VARIANCE PETITION	RF 118				
WASTE MATRIX CODE - Site	5230	WIPP PART B APPLICATION	GLASS		
- Group	Inorganic Non-metal Waste		TRUCON	RF 118	

Site **RF-370**  
Assigned **RF-370**

**WASTE VOLUMES (cu. m.)**

Retrievable	193
Projected	0
Total	193

**EPA CODE(s)**

D006A
D003D
D003D

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	528.85	528.85	0.00
	Organics			
Solidified	Celulosics			
	Rubber			
	Plastics			
Soils	Organic Matrix			
	Inorganic Matrix			
Packaging Materials	Soil			
	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 24

29-Jun-94

<b>DATABASE WS ID</b>	RF-W057	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Rocky Flats
<b>WS NAME</b>	Insulation/TRM				
<b>NO MIGRATION VARIANCE PETITION</b>	RF 122				
<b>WASTE MATRIX CODE - Site</b>	5290	<b>WIPP PART B APPLICATION</b>	FIREBRICK AND CERAMIC CRUCIB		
<b>- Group</b>	Inorganic Non-metal Waste		TRUCON/RF 122		

**DC's**

**Site** RF-438

**Assigned** RF-438

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	4
Total	4

**EPA CODE(s)**

F001
F001
F002
F002

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	293.27	194.71	24.04
	<b>Organics</b>			
	Celulosics	9.62	4.81	1.20
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**Footnotes:** 16



29-Jun-94

<b>DATABASE WS ID</b>	RF-W058	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Rocky Flats
<b>WS NAME</b>	Misc Pu Recovery Byproducts/TRM				
<b>NO MIGRATION VARIANCE PETITION</b>	RF 124				
<b>WASTE MATRIX CODE</b>	- Site	3141	<b>WIPP PART B APPLICATION</b>	PYROCHEMICAL SALT	
	- Group	Salt Waste		TRUCON/RF 124	

**DC's**

Site RF-411

Assigned RF-429

**WASTE VOLUMES (cu. m.)**

Retrievable	754
Projected	0
Total	754

**EPA CODE(s)**

D002B
D003D
D007A

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	14.42	12.02	0.48
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	567.30	216.30	48.10
<b>Organics</b>	Celulosics			
	Rubber			
<b>Solidified</b>	Plastics			
	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 24

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-W059	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Sand, Slag, and Crucible/TRM				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3119	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete	

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	461
Projected	0
<b>Total</b>	<b>461</b>

**EPA CODE(s)**

D007A
D003D

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes:

Information Only

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-W060	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Coarse Graphite/TRM				
NO MIGRATION VARIANCE PETITION	RF 115				
WASTE MATRIX CODE - Site	5340	WIPP PART B APPLICATION	GRAPHITE		
- Group	Graphite Waste		TRUCON	RF 115	

Site **RF-303**  
Assigned **RF-303**

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

D006A

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	1673.08	115.38	0.00
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 24

Information Only

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-W063	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Miscellaneous Liquids/TRM				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	1190	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete

**IDC's**

Site	Not Reported
Assigned	RF-800

**WASTE VOLUMES (cu. m.)**

Retrievable	36
Projected	14
Total	50

**EPA CODE(s)**

D007A
D002B

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 1, 8, 16, 21, 22, 23

Information Only

E-217

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-W065	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Calcium Metal/TRM				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	6290	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete	

DC's

Site RF-333

Assigned RF-800

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

**EPA CODE(s)**

D003D

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics			
Organics	Celulosics			
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix	1057.69	793.27	346.15
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 7, 16, 21, 22, 23

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-W066	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Filters & Media/TRM				
NO MIGRATION VARIANCE PETITION	RF 119				
WASTE MATRIX CODE	- Site	5410	WIPP PART B APPLICATION		FILTERS
	- Group	Filter Waste	TRUCON		RF 119

**DC's**

Site RF-490

Assigned RF-490

**WASTE VOLUMES (cu. m.)**

Retrievable	81
Projected	17
<b>Total</b>	<b>98</b>

**EPA CODE(s)**

D006A
D009X
D001C
D002B
D004A
D007A
D008A
D011A
D003E
F001
D010A
F002
F005A

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	429.82	429.82	0.00
<b>Organics</b>	Celulosics			
	Rubber			
<b>Solidified</b>	Plastics	8.77	8.77	0.00
	Organic Matrix			
<b>Soils</b>	Inorganic Matrix			
	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 24

## Information Only

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-W067	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Cemented Filters/TRM				
NO MIGRATION VARIANCE PETITION	RF 119				
WASTE MATRIX CODE - Site	5410	WIPP PART B APPLICATION	FILTERS		
- Group	Filter Waste	TRUCON/RF 119			

**DC's**  
 Site RF-376  
 Assigned RF-376

**WASTE VOLUMES (cu. m.)**

Retrievable	125
Projected	5
Total	130

**EPA CODE(s)**

D009X
D001C
D002B
D003E
D005A
D006A
F003
D008A
F001
F002
D007A

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	24.04	4.81	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	1418.27	254.81	0.00
Organics	Celulosics			
	Rubber			
Solidified	Plastics	38.46	14.42	0.00
	Organic Matrix			
Soils	Inorganic Matrix			
	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 24

Information Only

29-Jun-94

<b>DATABASE WS ID</b>	RF-W068	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Rocky Flats
<b>WS NAME</b>	Particulate Sludge/TRM				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	3129	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Solidified Inorganic Waste		<b>TRUCON</b>	Information Incomplete	

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	61
Projected	0
<b>Total</b>	<b>61</b>

**EPA CODE(s)**

D006A
D001C
D007A
D008A
F001
F002
F001
F002
F005A
F005A

<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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**Footnotes:**





# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RF-W069	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Organic Resins/TRM				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3212	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Organic Waste		TRUCON	Information Incomplete	

**IDC's**  
 Site: Not Reported  
 Assigned: RF-806.1

### WASTE VOLUMES (cu. m.)

Retrievable	13
Projected	0
Total	13

### EPA CODE(s)

F001
F002
D007A
D006A
D008A
D001C
F001
F005A
F005A
F002

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	2012.02	625.00	164.90
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 3, 8, 16, 17, 21, 22, 23, 24

Information Only

29-Jun-94

DATABASE WS ID	RF-W076	HANDLING	CH	FIELD OFFICE	Rocky Flats
WS NAME	Process Residues/TRM				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3119	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete	

DC's

Site Not Reported

Assigned RF-806.2

WASTE VOLUMES (cu. m.)

Retrievable	70
Projected	0
Total	70

EPA CODE(S)

F002
D008A
D007A
D001C
F005A
D006A
F002
F005A
F001
F001

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
Organics	Celulosics			
	Rubber			
Solidified	Plastics			
	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

MINIARY

Footnotes: 3, 8, 16, 17, 21, 22, 23

# WASTE STREAM PROFILES (CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RL-T01	HANDLING	CH	FIELD OFFICE	Richland
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	WIPP PART B APPLICATION	Not Applicable		
	- Group	Solidified Inorganic Waste	TRUCON	Information Incomplete	

**IDC's**

Site	Not Reported
Assigned	OR-001

**WASTE VOLUMES (cu. m.)**

Retrievable	1987
Projected	2907
<b>Total</b>	<b>4894</b>

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

Information Only

E - 224

403

29-Jun-94

<b>DATABASE WS ID</b>	RL-T02	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Richland
<b>WS NAME</b>	NON MIXED TRU DERIVED FROM IDB				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b> - Site		<b>WIPP PART B APPLICATION</b>	Not Applicable		
- Group	Soil	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site: Not Reported

Assigned: RF-374

**WASTE VOLUMES (cu. m.)**

Retrievable	4587
Projected	2907
<b>Total</b>	<b>7494</b>

<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	3072.12	584.13	0.00
<b>Organics</b>	Celulosics	12.02	12.02	0.00
	Rubber			
	Plastics	12.02	12.02	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil	144.23	64.90	0.00
	<b>Packaging Materials</b>			
	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

**Information Only**

E-225

H24

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RL-T03	HANDLING	CH	FIELD OFFICE	Richland
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable		
- Group	Heterogeneous Waste		TRUCON	Information Incomplete	

**IDC's**

Site	Not Reported
Assigned	RF-831

**WASTE VOLUMES (cu. m.)**

Retrievable	8907
Projected	2907
<b>Total</b>	<b>11814</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	4.23	1.10	0.00
	<b>Organics</b>			
	Celulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 23, 27

29-Jun-94

<b>DATABASE WS ID</b>	RL-T04	<b>HANDLING</b>	RH	<b>FIELD OFFICE</b>	Richland
<b>WS NAME</b>	NON MIXED TRU DERIVED FROM IDB				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	<b>WIPP PART B APPLICATION</b>	Not Applicable		
	- Group	Heterogeneous Waste	TRUCON	Information Incomplete	

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	201
Projected	1227
<b>Total</b>	<b>1428</b>

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-Based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Materials	24.04	2.41	0.00
	<b>Organics</b>	Celulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified</b>	Organic Matrix	2.98	0.01	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes:

**Information Only**

203

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RL-T05	HANDLING	RH	FIELD OFFICE	Richland
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable		
- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete	

**IDC's**  
 Site Not Reported  
 Assigned RF-440

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	1227
Total	1227

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	290.75	290.75	0.00
	Organics			
	Celulosics	1.10	1.10	0.00
	Rubber	1.10	1.10	0.00
	Plastics	19.82	19.82	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

Information Only

29-Jun-94

<b>DATABASE WS ID</b>	RL-T06	<b>HANDLING</b>	RH	<b>FIELD OFFICE</b>	Richland
<b>WS NAME</b>	NON MIXED TRU DERIVED FROM IDB				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	<b>WIPP PART B APPLICATION</b>		Not Applicable	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

**IDC's**

Site: Not Reported

Assigned: RF-480

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	1227
Total	1227

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	<b>Organics</b>	Celulosics	45.27	7.43
Rubber		67.57	15.09	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27



# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RL-T07	HANDLING	RH	FIELD OFFICE	Richland
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable		
- Group	Inorganic Non-metal Waste	TRUCON	Information Incomplete		

**IDC's**

Site	Not Reported
Assigned	RF-371

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	1227
<b>Total</b>	<b>1227</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	572.12	572.12	0.00
	<b>Organics</b>			
	Celulosics	24.04	24.04	0.00
	Rubber			
	Plastics	24.04	24.04	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

29-Jun-94

<b>DATABASE WS ID</b>	RL-W072	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Richland
<b>WS NAME</b>	TC METAL INORGANIC SOLID DEBRIS, TRU(HG)				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	5420	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

**IDC's**

<b>Site</b>	TRUM-02
<b>Assigned</b>	RF-480

**WASTE VOLUMES (cu. m.)**

<b>Retrievable</b>	8
<b>Projected</b>	5
<b>Total</b>	13

<b>WASTE PARAMETERS (kg/m<sup>3</sup>)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	<b>Organics</b>	Celulosics	45.27	7.43
	Rubber			
	Plastics	67.57	15.09	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**Footnotes:** 16, 17, 21, 22, 23

**Information Only**  
E-231

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RL-W074	HANDLING	CH	FIELD OFFICE	Richland
WS NAME	TC METAL ORGANIC SOLID DEBRIS, TRU				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5440	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

Site **TRUM-04**

Assigned **RH-001**

**WASTE VOLUMES (cu. m.)**

Retrievable	30
Projected	21
Total	51

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	432.69	115.38	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals	0.24	0.00	0.00
	Other Materials	101.11	49.05	0.00
	<b>Organics</b>	Celulosics	10.67	0.48
	Rubber	96.26	7.21	0.00
	Plastics	155.00	16.34	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22, 23

## Information Only

29-Jun-94

<b>DATABASE WS ID</b>	RL-W075	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Richland
<b>WS NAME</b>	TC METAL ORGANIC SOLID DEBRIS, TRU (HG)				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	5440	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Heterogeneous Waste	<b>TRUCON</b>	Information Incomplete	

**IDC's**

Site **TRUM-05**

Assigned **RH-001**

**WASTE VOLUMES (cu. m.)**

Retrievable	5
Projected	3
<b>Total</b>	<b>8</b>

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	432.69	115.38	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals	0.24	0.00	0.00
	Other Materials	101.11	49.05	0.00
<b>Organics</b>	Celulosics	10.67	0.48	0.00
	Rubber	96.26	7.21	0.00
	Plastics	155.00	16.34	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22, 23

**Information Only**

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RL-W077	HANDLING	CH	FIELD OFFICE	Richland
WS NAME	NON-TC MET/SOLVENT ORG. SOLID DEBRIS-TRU				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5440	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste		TRUCON	Information Incomplete	

**IDC's**  
 Site   
 Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	5
Projected	3
Total	8

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	432.69	115.38	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals	0.24	0.00	0.00
	Other Materials	101.11	49.05	0.00
<b>Organics</b>	Celulosics	10.67	0.48	0.00
	Rubber	96.26	7.21	0.00
	Plastics	155.00	16.34	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes:

Information Only

29-Jun-94

<b>DATABASE WS ID</b>	RL-W078	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Richland
<b>WS NAME</b>	LEAD ACID BATTERIES, TRU				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	7410	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Lead/Cadmium Metal Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

**Site** TRUM-08

**Assigned** RF-480

**WASTE VOLUMES (cu. m.)**

<b>Retrievable</b>	1
<b>Projected</b>	33
<b>Total</b>	34

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	<b>Organics</b>	Celulosics	45.27	7.43
Rubber		67.57	15.09	0.00
Plastics				
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**Footnotes:** 11, 16, 17, 21, 22, 23

434

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0

June 1994

29-Jun-94

DATABASE WS ID	RL-W079	HANDLING	CH	FIELD OFFICE	Richland
WS NAME	LEAD ACID BATTERIES, TRU (HG)				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	7410	WIPP PART B APPLICATION	Information Incomplete		
- Group	Lead/Cadmium Metal Waste	TRUCON	Information Incomplete		

IDC's  
 Site **TRUM-09**  
 Assigned **RF-480**

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	22
Total	23

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
Organics	Celulosics	45.27	7.43	0.00
	Rubber			
Solidified	Plastics	67.57	15.09	0.00
	Organic Matrix			
Soils	Inorganic Matrix			
	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 11, 16, 17, 21, 22, 23

Information Only

29-Jun-94

<b>DATABASE WS ID</b>	RL-W080	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Richland
<b>WS NAME</b>	RADIOACTIVE LEAD SOLIDS, TRU				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	5420	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Heterogeneous Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

**Site** TRUM-10

**Assigned** RF-321

**WASTE VOLUMES (cu. m.)**

Retrievable	27
Projected	2
<b>Total</b>	<b>29</b>

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
<b>Solidified</b>	Plastics			
	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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**Footnotes:** 16, 17, 21, 22, 23

**Information Only**

E-237

430



# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RL-W081	HANDLING	CH	FIELD OFFICE	Richland
WS NAME	RADIOACTIVE LEAD GLASS SOLIDS, TRU				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5490	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste	TRUCON	Information Incomplete		

DC's

Site TRUM-11

Assigned RF-440

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	1

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	290.75	290.75	0.00
	<b>Organics</b>			
	Celulosics	1.10	1.10	0.00
	Rubber	1.10	1.10	0.00
	Plastics	19.82	19.82	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

Information Only

E - 238

11/21

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RL-W082	HANDLING	CH	FIELD OFFICE	Richland
WS NAME	RADIOACTIVE LEAD SOLIDS, TRU (HG)				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	7200	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Lead/Cadmium Metal Waste		TRUCON	Information Incomplete

DC's

Site: TRUM-12

Assigned: RF-321

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
<b>Solidified</b>	Plastics			
	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

Information Only

438

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RL-W083	HANDLING/CH	FIELD OFFICE
WS NAME	RADIOACTIVE LEAD SOLIDS, TRU (LB)		
NO MIGRATION VARIANCE PETITION	Information Incomplete		
WASTE MATRIX CODE	- Site	5120	WIPP PART B APPLICATION
	- Group	Lead/Cadmium Metal Waste	Information Incomplete
		TRUCON	Information Incomplete

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	1
Projected	0
Total	1

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes:

Information Only

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

25-Jun-94

DATABASE WS ID	RL-W085	HANDLING	CH	FIELD OFFICE	Richland
WS NAME	SOLVENT/TC METAL INORG. SOLID DEBRIS-TRU				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	5420	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Heterogeneous Waste		TRUCON	Information Incomplete

**IDC's**  
 Site   
 Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	1
Total	4

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	256.10	256.10	0.00
	Aluminum-Based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Materials	29.28	29.28	0.00
	<b>Organics</b>	Celulosics	45.27	7.43
Rubber				
Plastics		67.57	15.09	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes:

Information Only

E-241

340

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RL-W086	HANDLING	CH	FIELD OFFICE	Richland
WS NAME	SOLVENT/TC METAL ORG. SOLID DEBRIS, TRU				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	6440	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste	TRUCON	Information Incomplete		

**IDC's**

Site TRUM-16

Assigned RF-831

**WASTE VOLUMES (cu. m.)**

Retrievable	5
Projected	4
Total	9

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	4.23	1.10	0.00
	Organics			
	Celulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22, 23

Information Only

E-242

29-Jun-94

DATABASE WS ID	RL-W101	HANDLING	CH	FIELD OFFICE	Richland
WS NAME	WA NON-TC/SOLV. ORG. SOLID DEBRIS, TRU				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5440	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste		TRUCON	Information Incomplete	

DC's

Site TRUM-17

Assigned RF-831

WASTE VOLUMES (cu. m.)

Retrievable	2
Projected	169
Total	171

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	4.23	1.10	0.00
	Organics	Celulosics	576.85	115.83
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22, 23

Information Only

4412

29-Jun-94

<b>DATABASE WS ID</b>	RL-W133	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Richland
<b>WS NAME</b>	MTRU-SOIL-TC MET				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	4200	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Soil	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site **TRUM-21**

Assigned **MD-842**

**WASTE VOLUMES (cu. m.)**

Retrievable	12
Projected	274
<b>Total</b>	<b>286</b>

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys	0.57	0.57	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals	0.15	0.08	0.00
	Other Materials	33.91	5.70	0.00
<b>Organics</b>	Celulosics	0.71	0.71	0.00
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil	671.46	564.57	457.45
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**Footnotes:** 16, 17, 21, 22, 23

29-Jun-94

<b>DATABASE WS ID</b>	RL-W134	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Richland
<b>WS NAME</b>	MTRU-APPENDIX V LABPACKS-CA				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	6190	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Solidified Organic Waste	<b>TRUCON</b>	Information Incomplete		

**DC's**

Site **TRUM-22**

Assigned **RH-004**

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	22
Total	22

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	75.00	75.00	0.00
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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**Footnotes:** 5, 16, 17, 21, 22, 23, 24

**Information Only**  
E-245

444



# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	RL-W135	HANDLING	CH	FIELD OFFICE	Richland
WS NAME	MTRU-APPENDIX V LABPACKS-SOLVENT/CA				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	6190	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Inorganic Waste		TRUCON	Information Incomplete	

**IDC's**  
 Site: RH-001  
 Assigned: RH-001

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	107
Total	109

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys	432.69	115.38	0.00
	Aluminum-Based Metals/Alloys			
	Other Metals	0.24	0.00	0.00
	Other Materials	101.11	49.05	0.00
	<b>Organics</b>	Celulosics	10.67	0.48
Rubber		96.26	7.21	0.00
Plastics		155.00	16.34	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
	<b>Packaging Materials</b>			
	Steel		141.83	
	Plastic		39.42	

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Footnotes: 5, 16, 17, 21, 22, 23, 24

Information Only

4/15

29-Jun-94

<b>DATABASE WS ID</b>	SA-T01	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Albuquerque
<b>WS NAME</b>	NON MIXED TRU				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b> - Site	8900	<b>WIPP PART B APPLICATION</b>	Not Applicable		
- Group	Unknown Waste	<b>TRUCON</b>	Information Incomplete		

**IDC's**

Site: Not Reported

Assigned: UNK

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	46
Total	46

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 20, 21, 22, 27

29-Jun-94

DATABASE WS ID	SA-W134	HANDLING	RH	FIELD OFFICE	Albuquerque
WS NAME	TRANSURANIC WASTE AT HOT CELL FACILITY				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	8900	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Unknown Waste	TRUCON	Information Incomplete	

DC's

Site Not Reported

Assigned UNK

WASTE VOLUMES (cu. m.)

Retrievable	1
Projected	0
Total	1

EPA CODE(s)

UNK

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	Organics	Celulosics		
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 21, 22, 23, 26

Information Only

E-248

447

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	SR-T01	HANDLING	CH	FIELD OFFICE	Savannah Riv
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	WIPP PART B APPLICATION		Not Applicable	
	- Group	Solidified Organic Waste		TRUCON	Information Incomplete

**IDC's**

Site	Not Reported
Assigned	RF-801

**WASTE VOLUMES (cu. m.)**

Retrievable	198
Projected	124
Total	323

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	1134.62	923.08	350.96
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

Information Only

11/82

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	SR-T02	HANDLING/CH	FIELD OFFICE Savannah Riv
WS NAME	NON MIXED TRU DERIVED FROM IDB		
NO MIGRATION VARIANCE PETITION	Information Incomplete		
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable
- Group	Combustible Waste	TRUCON	Information Incomplete

**IDC's**

Site	Not Reported
Assigned	RF-831

**WASTE VOLUMES (cu. m.)**

Retrievable	4747
Projected	2987
<b>Total</b>	<b>7734</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	4.23	1.10	0.00
	<b>Organics</b>			
	Celulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**These are not actual site-generated waste streams.** The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

Information Only

29-Jun-94

DATABASE WS ID	SR-W006	HANDLING	CH	FIELD OFFICE	Savannah Riv
WS NAME	MIXED TTA/XYLENE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	2000	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Organic Waste	TRUCON	Information Incomplete		

DC's

Site	Not Reported
Assigned	RF-801

WASTE VOLUMES (cu. m.)

Retrievable	0
Projected	0
Total	0

WASTE PARAMETERS (kg/m3) Max Avg Min

<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	1134.62	923.08	350.96
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 1, 8, 16, 17, 21, 22, 23

29-Jun-94

<b>DATABASE WS ID</b>	SR-W026	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Savannah Riv
<b>WS NAME</b>	THIRDS TRU WASTE				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE - Site</b>	5400	<b>WIPP PART B APPLICATION</b>	Information Incomplete		
<b>- Group</b>	Heterogeneous Waste	<b>TRUCON</b>	Information Incomplete		

**DC's**

Site 049/050

Assigned RF-831

**WASTE VOLUMES (cu. m.)**

Retrievable	67
Projected	5813
Total	5880

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	4.23	1.10	0.00
	<b>Organics</b>			
	Celulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 16, 17, 21, 22, 23

**Information Only**

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	SR-W027	HANDLING	CH	FIELD OFFICE	Savannah Riv
WS NAME	SOLVENT TRU WASTE				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	5400	WIPP PART B APPLICATION	Information Incomplete		
- Group	Heterogeneous Waste	TRUCON	Information Incomplete		

**IDC's**  
 Site: 049/050  
 Assigned: RF-831

**WASTE VOLUMES (cu. m.)**

Retrievable	4956
Projected	0
<b>Total</b>	<b>4956</b>

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials	4.23	1.10	0.00
	<b>Organics</b>			
	Celulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

Information Only

45



# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	SR-W044	HANDLING	CH	FIELD OFFICE	Savannah Riv
WS NAME	TRI-BUTYL-PHOSPHATE & N-PARAFFIN - TRU				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE	- Site	2100	WIPP PART B APPLICATION	Information Incomplete	
	- Group	Solidified Organic Waste		TRUCON	Information Incomplete

**IDC's**  
 Site: 096  
 Assigned: RF-801

**WASTE VOLUMES (cu. m.)**

Retrievable	3
Projected	0
Total	3

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>			
	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix	1134.62	923.08	350.96
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Footnotes: 1, 8, 16, 17, 21, 22, 23

Information Only

29-Jun-94

<b>DATABASE WS ID</b>	SR-W053	<b>HANDLING</b>	CH	<b>FIELD OFFICE</b>	Savannah Riv
<b>WS NAME</b>	ROCKY FLATS INCINERATOR ASH				
<b>NO MIGRATION VARIANCE PETITION</b>	Information Incomplete				
<b>WASTE MATRIX CODE</b>	- Site	3111	<b>WIPP PART B APPLICATION</b>	Information Incomplete	
	- Group	Solidified Inorganic Waste	TRUCON	Information Incomplete	

**IDC's**

Site

Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	0
Projected	0
Total	0

<b>WASTE PARAMETERS (kg/m3)</b>		<b>Max</b>	<b>Avg</b>	<b>Min</b>
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes:

# WASTE STREAM PROFILES

(CONTINUED) CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	WV-T01	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable		
- Group	Solidified Inorganic Waste	TRUCON	Information Incomplete		

**IDC's**

Site	Not Reported
Assigned	RF-806.2

**WASTE VOLUMES (cu. m.)**

Retrievable	19
Projected	0
Total	19

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

## Information Only

29-Jun-94

DATABASE WS ID	WV-T02	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	NON MIXED TRU DERIVED FROM IDB				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable		
- Group	Lead/Cadmium Metal Waste	TRUCON	Information Incomplete		

**IDC's**

Site: Not Reported

Assigned: RF-321

**WASTE VOLUMES (cu. m.)**

Retrievable	29
Projected	0
<b>Total</b>	<b>29</b>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

29-Jun-94

DATABASE WS ID	WV-T03	HANDLING	RH	FIELD OFFICE	Idaho
WS NAME	NON MIXED TRU				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site		WIPP PART B APPLICATION	Not Applicable		
- Group	Unknown Waste	TRUCON	Information Incomplete		

**IDC's**

Site Not Reported

Assigned UNK

**WASTE VOLUMES (cu. m.)**

Retrievable	499
Projected	0
Total	499

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
	<b>Organics</b>	Celulosics		
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

These are not actual site-generated waste streams. The non-mixed TRU waste volume was calculated from the difference between the 1993 IDB and the Phase II MWIR. These IDCs, WMCs, and WMCGs were generated by portioning the TRU waste volumes to the major mixed TRU waste streams.

Footnotes: 15, 18, 21, 22, 27

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	WV-W024	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	TRU LEAD				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	7200	WIPP PART B APPLICATION	Information Incomplete		
- Group	Lead/Cadmium Metal Waste	TRUCON	Information Incomplete		

IDC's  
 Site 2404  
 Assigned RF-321

**WASTE VOLUMES (cu. m.)**

Retrievable	2
Projected	0
Total	2

**EPA CODE(s)**

D008C

WASTE PARAMETERS (kg/m <sup>3</sup> )		Max	Avg	Min
<b>Inorganics</b>	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Materials			
<b>Organics</b>	Celulosics			
	Rubber			
	Plastics			
<b>Solidified</b>	Organic Matrix			
	Inorganic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Footnotes: 16, 17, 21, 22, 23

# WASTE STREAM PROFILES

(CONTINUED)

CAO-94-1005, Rev. 0  
June 1994

29-Jun-94

DATABASE WS ID	WV-W041	HANDLING	CH	FIELD OFFICE	Idaho
WS NAME	TRU PAINT (DRY) WITH METALS				
NO MIGRATION VARIANCE PETITION	Information Incomplete				
WASTE MATRIX CODE - Site	3131	WIPP PART B APPLICATION	Information Incomplete		
- Group	Solidified Inorganic Waste	TRUCOM	Information Incomplete		

IDC's  
 Site   
 Assigned

**WASTE VOLUMES (cu. m.)**

Retrievable	<input type="text" value="0"/>
Projected	<input type="text" value="0"/>
Total	<input type="text" value="0"/>

**EPA CODE(s)**

<input type="text" value="D007A"/>
<input type="text" value="D008A"/>

WASTE PARAMETERS (kg/m3)		Max	Avg	Min
Inorganics	Iron-Based Metals/Alloys			
	Aluminum-Based Metals/Alloys			
	Other Metals			
	Other Materials			
Organics	Celulosics			
	Rubber			
	Plastics			
Solidified	Organic Matrix			
	Inorganic Matrix	2012.02	625.00	164.90
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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Footnotes:

Information Only

**APPENDIX F**

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**Information Only**



**Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes**

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
AE	Categorized Metal	MTRU	CH	100.0%
	Solidified Inorganics	MTRU	CH	3.4%
	Solidified Inorganics	TRU	CH	96.6%
	Solidified Organics	MTRU	CH	100.0%
	Uncategorized Metal	TRU	CH	100.0%
	Uncategorized Metal	TRU	RH	100.0%

Information Only

## SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES

30-Jun-94

DOE TRU SITE: AE

### WASTE PARAMETERS FOR Lead/Cadmium Metal Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
AE-W041	0.00	0.70	0.70
AE-W042	0.40	0.00	0.40
	<b>0.40</b>	<b>0.70</b>	<b>1.10</b>

#### Material Parameters (kg/m3)

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys	256.10	93.13	0.00
	Aluminum-based Metals/Alloys	27.77	10.10	0.00
	Other Metals	913.46	201.72	0.00
	Other Inorganic Materials	29.28	10.65	0.00
Organics	Cellulosics	45.27	2.70	0.00
	Rubber			
	Plastics	67.57	5.49	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

### WASTE PARAMETERS FOR Solidified Inorganic Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
AE-W038	3.30	2.00	5.30
AE-W040	0.40	0.00	0.40
AE-T01	17.40	142.40	159.80
	<b>21.10</b>	<b>144.40</b>	<b>165.50</b>

#### Material Parameters (kg/m3)

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
Organics	Cellulosics			
	Rubber			
	Plastics			
Solidified Materials	Inorganic Matrix	1057.69	419.18	346.15
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

**WASTE PARAMETERS FOR Solidified Organic Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
AE-W039	0.03	0.13	0.15
	0.03	0.13	0.15

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	2012.02	625.00	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Unspecified Metal Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
AE-T03	4.40	35.70	40.10
	4.40	36.70	40.10

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only

**SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES**

30-Jun-94

DOE TRU SITE: AE

**WASTE PARAMETERS FOR Unspecified Metal Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
AE-T02	0.00	47.60	47.60
	0.00	47.60	47.60

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
<b>Organics</b>	Other Inorganic Materials			
	Cellulosics			
	Rubber			
<b>Solidified Materials</b>	Plastics			
	Inorganic Matrix			
<b>Soils</b>	Organic Matrix			
	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

Information Only

Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
------	-------------	--------------------	----------	---------

AL

Solidified Inorganics

MTRU

CH

100.0%

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: AL

**WASTE PARAMETERS FOR Solidified Inorganic Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
AL-W005	0.00	0.25	0.25
	0.00	0.25	0.25

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix	1057.69	793.27	346.15
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only

**Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes**

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
AW	Filter	MTRU	RH	100.0%
	Heterogeneous	MTRU	RH	100.0%
	Solidified Inorganics	MTRU	RH	100.0%
	Uncategorized Metal	MTRU	RH	100.0%

Information Only

**SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: AW

**WASTE PARAMETERS FOR Filter Waste**

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
AW-W024	7.14	0.39	7.53
	7.14	0.39	7.53

**Material Parameters (kg/m3)**

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	429.82	429.82	0.00
Organics	Cellulosics			
	Rubber			
	Plastics	8.77	8.77	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		2600.00	
	Lead		460.00	

**WASTE PARAMETERS FOR Heterogeneous Waste**

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
AW-W020	0.00	0.20	0.20
	0.00	0.20	0.20

**Material Parameters (kg/m3)**

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Inorganic Materials	24.04	2.41	0.00
Organics	Cellulosics	184.81	80.91	0.00
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix	2.98	0.01	0.00
Soils	Soil			
Packaging Materials	Steel		2600.00	
	Lead		460.00	

Information Only



**SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)**

30-Jun-94

**WASTE PARAMETERS FOR Lead/Cadmium Metal Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
AW-W016	0.00	0.88	0.88
	<b>0.00</b>	<b>0.88</b>	<b>0.88</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	256.10	256.10	0.00
	Aluminum-based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Inorganic Materials	29.28	29.28	0.00
<b>Organics</b>	Cellulosics	45.27	7.43	0.00
	Rubber			
	Plastics	67.57	15.09	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

**WASTE PARAMETERS FOR Solidified Inorganic Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
AW-W022	0.00	0.07	0.07
	<b>0.00</b>	<b>0.07</b>	<b>0.07</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix	2012.02	625.00	164.90
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

4/69

**SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)**

30-Jun-94

**WASTE PARAMETERS FOR Unspecified Metal Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
AW-W018	0.14	0.01	0.15
AW-W019	0.01	0.00	0.01
AW-W021	0.00	0.60	0.60
	<b>0.15</b>	<b>0.61</b>	<b>0.76</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	256.10	256.10	0.00
	Aluminum-based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Inorganic Materials	29.28	29.28	0.00
<b>Organics</b>	Cellulosics	45.27	7.43	0.00
	Rubber			
	Plastics	67.57	15.09	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

Information Only

408

Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
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BC	Unknown	TRU	RH	100.0%
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Information Only

**SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: BC

WASTE PARAMETERS FOR Unknown Waste

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
BC-T01	0.00	368.00	368.00
	0.00	368.00	368.00

Material Parameters (kg/m3)

	<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>			
Iron-based Metals/Alloys			
Aluminum-based Metals/Alloys			
Other Metals			
Other Inorganic Materials			
<b>Organics</b>			
Cellulosics			
Rubber			
Plastics			
<b>Solidified Materials</b>			
Inorganic Matrix			
Organic Matrix			
<b>Soils</b>			
Soil			
<b>Packaging Materials</b>			
Steel		2600.00	
Lead		460.00	

Information Only

Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes

Site	Matrix_Name	Mixed or Non Mixed	CH or RH	Percent
BE	Unknown	TRU	CH	100.0%
	Unknown	TRU	RH	100.0%

Information Only

473

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: BE

WASTE PARAMETERS FOR Unknown Waste

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
BE-T01	0.00	236.50	236.50
	0.00	236.50	236.50

Material Parameters (kg/m3)

	<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys		
	Aluminum-based Metals/Alloys		
	Other Metals		
<b>Organics</b>	Other Inorganic Materials		
	Cellulosics		
	Rubber		
	Plastics		
<b>Solidified Materials</b>	Inorganic Matrix		
	Organic Matrix		
<b>Soils</b>	Soil		
<b>Packaging Materials</b>	Steel	141.83	
	Plastic	39.42	

Information Only

579

# SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)

30-Jun-94

DOE TRU SITE: BE

## WASTE PARAMETERS FOR Unknown Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
BE-T02	0.00	7.20	7.20
	0.00	7.20	7.20

## Material Parameters (kg/m3)

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
Organics	Cellulosics			
	Rubber			
	Plastics			
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		2600.00	
	Lead		460.00	

Information Only

**Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes**

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
ET	Categorized Metal	MTRU	CH	0.7%
	Categorized Metal	TRU	CH	99.3%

Information Only



**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: ET

**WASTE PARAMETERS FOR Lead/Cadmium Metal Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
ET-T01	2.48	0.20	2.68
ET-W002	0.02	0.00	0.02
	2.50	0.20	2.70

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only

Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
IN	Combustible	MTRU	CH	100.0%
	Filter	MTRU	CH	100.0%
	Filter	MTRU	RH	100.0%
	Graphite	MTRU	CH	82.2%
	Graphite	TRU	CH	17.8%
	Heterogeneous	MTRU	CH	100.0%
	Heterogeneous	MTRU	RH	57.6%
	Heterogeneous	TRU	RH	42.4%
	Inorganic Non-Metal	MTRU	CH	98.9%
	Inorganic Non-Metal	TRU	CH	1.1%
	Salt Waste	MTRU	CH	65.1%
	Salt Waste	TRU	CH	34.9%
	Soils	MTRU	CH	100.0%
	Solidified Inorganics	MTRU	CH	99.5%
	Solidified Inorganics	TRU	CH	0.5%
	Solidified Inorganics	MTRU	RH	100.0%
	Solidified Organics	MTRU	CH	99.4%
	Solidified Organics	TRU	CH	0.6%
	Uncategorized Metal	MTRU	CH	100.0%
	Uncategorized Metal	TRU	CH	0.0%
	Unknown	MTRU	CH	100.0%
	Unknown	MTRU	RH	60.4%
	Unknown	TRU	RH	39.6%

972

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: IN

**WASTE PARAMETERS FOR Combustible Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
IN-W254	10.18	0.00	10.18
IN-W202	109.90	0.00	109.90
IN-W206	0.85	0.00	0.85
IN-W326	0.42	0.00	0.42
IN-W252	160.23	0.00	160.23
IN-W266	25.65	0.00	25.65
IN-W336	4.14	0.00	4.14
IN-W198	170.38	0.00	170.38
IN-W327	4.24	0.00	4.24
IN-W260	63.60	0.00	63.60
IN-W330	7.42	0.00	7.42
	<b>657.01</b>	<b>0.00</b>	<b>657.01</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals	504.81	118.79	0.00
	Other Inorganic Materials	144.23	14.18	0.00
<b>Organics</b>	Cellulosics	918.75	27.81	0.00
	Rubber	464.42	130.69	0.00
	Plastics	1060.10	56.72	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

**WASTE PARAMETERS FOR Filter Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
IN-W306.4	1039.50	0.00	1039.50
IN-W214	0.64	0.00	0.64
IN-W207	1.48	0.00	1.48
IN-W206	383.08	0.00	383.08
	<b>1424.70</b>	<b>0.00</b>	<b>1424.70</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	500.00	238.61	0.00
Organics	Cellulosics	9.62	0.00	1.20
	Rubber			
	Plastics	8.77	2.36	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Graphite Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
IN-W276	391.78	0.00	391.78
IN-W370	66.78	0.00	66.78
IN-W389	12.30	0.00	12.30
IN-W368	3.39	0.00	3.39
IN-W367	4.44	0.00	4.44
IN-W272	1.91	0.00	1.91
IN-W275	6.36	0.00	6.36
	<b>486.96</b>	<b>0.00</b>	<b>486.96</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	1673.08	74.45	0.00
Organics	Cellulosics			
	Rubber			
	Plastics			
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

## SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)

30-Jun-94

### WASTE PARAMETERS FOR Heterogeneous Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
IN-W283	1.06	0.00	1.06
IN-W281	370.89	0.00	370.89
IN-W278	13.95	0.00	13.95
IN-W346	14.59	0.00	14.59
IN-W183	0.85	0.00	0.85
IN-W361	1.48	0.00	1.48
IN-W334	5.51	0.00	5.51
IN-W268	58.84	0.00	58.84
IN-W266	53.15	0.00	53.15
IN-W269	25.86	0.00	25.86
IN-W188	5774.64	0.00	5774.64
IN-W198	1.27	0.00	1.27
IN-W306.3	3465.00	0.00	3465.00
IN-W302	106.00	0.00	106.00
IN-W186	2695.14	0.00	2695.14
IN-W187	0.21	0.00	0.21
IN-W291	770.09	0.00	770.09
IN-W189	6.15	0.00	6.15
IN-W172	165.57	0.00	165.57
IN-W226	22.20	0.00	22.20
IN-W171	3.59	0.00	3.59
IN-W203	79.89	0.00	79.89
IN-W204	1.91	0.00	1.91
IN-W170	0.42	0.00	0.42
IN-W289	25.36	0.00	25.36
IN-W286	64.90	0.00	64.90
IN-W328	1.27	0.00	1.27
IN-W271	0.42	0.00	0.42
IN-W197	778.34	0.00	778.34
	<b>14608.66</b>	<b>0.00</b>	<b>14608.66</b>

<u>Material Parameters (kg/m3)</u>		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	1716.35	41.40	0.00
	Aluminum-based Metals/Alloys	38.22	0.48	0.00
	Other Metals	46.63	0.16	0.00
	Other Inorganic Materials	3072.12	5.20	0.00
<b>Organics</b>	Cellulosics	918.75	100.97	0.00
	Rubber	212.02	9.92	0.00
	Plastics	1060.10	43.83	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	2.98	0.00	0.00
<b>Soils</b>	Soil	144.23	0.24	0.00
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

# Information Only

### SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)

30-Jun-94

#### WASTE PARAMETERS FOR Inorganic Non-metal Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
IN-W161	111.38	0.00	111.38
IN-W248	2.76	0.00	2.76
IN-W243	247.70	0.00	247.70
IN-W240	169.09	0.00	169.09
IN-W374	9.75	0.00	9.75
IN-W245	168.96	0.00	168.96
IN-W247	199.46	0.00	199.46
IN-W230	18.23	0.00	18.23
	<b>927.33</b>	<b>0.00</b>	<b>927.33</b>

#### Material Parameters (kg/m3)

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	3072.12	332.31	0.00
Organics	Cellulosics	24.04	3.95	0.00
	Rubber	1.10	0.94	0.00
	Plastics	24.04	19.86	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil	144.23	0.68	0.00
	Packaging Materials	Steel		141.83
		Plastic		39.42

#### WASTE PARAMETERS FOR Salt Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
IN-W365	1.27	0.00	1.27
IN-W364	0.21	0.00	0.21
IN-W366	4.66	0.00	4.66
IN-W316	0.64	0.00	0.64
IN-W314	1.06	0.00	1.06
IN-W312	3.18	0.00	3.18
IN-W311	6.57	0.00	6.57
	<b>17.59</b>	<b>0.00</b>	<b>17.59</b>

#### Material Parameters (kg/m3)

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys	14.42	5.65	0.48
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	584.33	155.51	0.00
Organics	Cellulosics			
	Rubber			
	Plastics			
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
	Packaging Materials	Steel		141.83
		Plastic		39.42

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

**WASTE PARAMETERS FOR Soil**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
IN-W263	38.04	0.00	38.04
	<b>38.04</b>	<b>0.00</b>	<b>38.04</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	0.57	0.57	0.00
	Aluminum-based Metals/Alloys			
	Other Metals	0.15	0.08	0.00
	Other Inorganic Materials	33.91	5.70	0.00
<b>Organics</b>	Cellulosics	0.71	0.71	0.00
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil	671.46	564.57	457.45
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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Information Only

262

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

WASTE PARAMETERS FOR Solidified Inorganic Waste

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
IN-W181	9.51	0.00	9.51
IN-W228	1296.80	0.00	1296.80
IN-W179	5.51	0.00	5.51
IN-W222	276.10	0.00	276.10
IN-W218	459.19	0.00	459.19
IN-W169	0.85	0.00	0.85
IN-W221	14.42	0.00	14.42
IN-W177	176.17	0.00	176.17
IN-W216	2531.01	0.00	2531.01
IN-W367	0.42	0.00	0.42
IN-W366	2.54	0.00	2.54
IN-W186	70.81	0.00	70.81
IN-W306.1	1905.70	0.00	1905.70
IN-W363	2.33	0.00	2.33
IN-W362	21.41	0.00	21.41
IN-W332	0.85	0.00	0.85
IN-W361	5.09	0.00	5.09
IN-W267	0.42	0.00	0.42
IN-W347	54.30	0.00	54.30
IN-W267	7.43	0.00	7.43
IN-W174	151.16	0.00	151.16
IN-W373	0.21	0.00	0.21
<b>8992.23</b>	<b>0.00</b>	<b>8992.23</b>	

Material Parameters (kg/m3)

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals	0.32	0.00	0.00
	Other Inorganic Materials	528.85	0.19	0.00
<b>Organics</b>	Cellulosics	918.75	0.00	0.00
	Rubber	212.02	0.00	0.00
	Plastics	1060.10	0.01	0.00
<b>Solidified Materials</b>	Inorganic Matrix	2012.02	718.66	0.00
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	



**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

**WASTE PARAMETERS FOR Solidified Organic Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
IN-W157	226.83	0.00	226.83
IN-W164	1.91	0.00	1.91
IN-W167	164.09	0.00	164.09
IN-W220	553.53	0.00	553.53
IN-W188	1.06	0.00	1.06
IN-W364	1.48	0.00	1.48
IN-W365	4.66	0.00	4.66
IN-W319	2.13	0.00	2.13
IN-W321	10.60	0.00	10.60
IN-W317	51.52	0.00	51.52
	<b>1017.81</b>	<b>0.00</b>	<b>1017.81</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	2012.02	902.46	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Unknown Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
IN-W338	1.27	0.00	1.27
IN-W339	8.69	0.00	8.69
IN-W342	0.42	0.00	0.42
IN-W308	4139.66	0.00	4139.66
IN-W350	0.21	0.00	0.21
	<b>4160.25</b>	<b>0.00</b>	<b>4160.26</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

**WASTE PARAMETERS FOR Unspecified Metal Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
IN-W371	0.21	0.00	0.21
IN-W296	5243.44	0.00	5243.44
IN-W298	74.60	0.00	74.60
IN-W287	211.85	0.00	211.85
IN-W300	1513.42	0.00	1513.42
IN-W280	35.40	0.00	35.40
IN-W260	36.46	0.00	36.46
IN-W284	443.21	0.00	443.21
IN-W306.2	3118.50	0.00	3118.50
	<b>10677.09</b>	<b>0.00</b>	<b>10677.09</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	1528.85	254.58	0.00
	Aluminum-based Metals/Alloys	73.68	27.67	0.00
	Other Metals	1586.54	25.63	0.00
	Other Inorganic Materials	812.50	29.36	0.00
<b>Organics</b>	Cellulosics	115.00	8.34	0.00
	Rubber	2.42	0.01	0.00
	Plastics	67.57	14.76	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only

**SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: IN

**WASTE PARAMETERS FOR Filter Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
IN-W112	20.40	204.00	224.40
	20.40	204.00	224.40

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
Organics	Other Inorganic Materials	429.82	429.82	0.00
	Cellulosics			
	Rubber			
Solidified Materials	Plastics	8.77	8.77	0.00
	Inorganic Matrix			
Soils	Organic Matrix			
	Soil			
Packaging Materials	Steel		2600.00	
	Lead		460.00	

**WASTE PARAMETERS FOR Heterogeneous Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
IN-W139	5.43	0.00	5.43
IN-W323	1.91	0.00	1.91
IN-W388	5.41	0.00	5.41
	12.76	0.00	12.76

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
Inorganics	Iron-based Metals/Alloys	1716.35	87.27	0.00
	Aluminum-based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
Organics	Other Inorganic Materials	24.04	2.44	0.00
	Cellulosics	450.95	100.72	0.00
	Rubber	17.88	6.61	0.00
Solidified Materials	Plastics	149.04	58.37	0.00
	Inorganic Matrix			
Soils	Organic Matrix	2.98	0.01	0.00
	Soil			
Packaging Materials	Steel		2600.00	
	Lead		460.00	

Information Only

## SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)

30-Jun-94

### WASTE PARAMETERS FOR Solidified Inorganic Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
IN-W146	2.10	0.00	2.10
IN-W218	9.54	0.00	9.54
	11.64	0.00	11.64

### Material Parameters (kg/m3)

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
Organics	Cellulosics			
	Rubber			
	Plastics			
Solidified Materials	Inorganic Matrix	2012.02	655.36	164.90
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		2600.00	
	Lead		460.00	

### WASTE PARAMETERS FOR Unknown Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
IN-W341	0.21	0.00	0.21
IN-W349	6.36	0.00	6.36
IN-W369	0.64	0.00	0.64
IN-W360	0.21	0.00	0.21
IN-W372	3.60	0.00	3.60
IN-W337	0.21	0.00	0.21
	11.23	0.00	11.23

### Material Parameters (kg/m3)

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
Organics	Cellulosics			
	Rubber			
	Plastics			
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		2600.00	
	Lead		460.00	

Information Only

**Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes**

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
KA	Heterogeneous	TRU	CH	100.0%
	Heterogeneous	MTRU	RH	100.0%

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: KA

**WASTE PARAMETERS FOR Heterogeneous Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
KA-T01	2.40	0.00	2.40
	2.40	0.00	2.40

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Inorganic Materials	24.04	2.41	0.00
	<b>Organics</b>	Cellulosics	184.81	80.91
Rubber		17.88	7.36	0.00
Plastics		149.04	64.90	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	2.98	0.01	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only

100

**SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: KA

**WASTE PARAMETERS FOR Heterogeneous Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
KA-W046	11.23	25.20	36.43
	11.23	25.20	36.43

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Inorganic Materials	24.04	2.41	0.00
<b>Organics</b>	Cellulosics	184.81	80.91	0.00
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	2.98	0.01	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

Information Only

**Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes**

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
LA	Categorized Metal	MTRU	CH	100.0%
	Heterogeneous	MTRU	CH	43.1%
	Heterogeneous	TRU	CH	56.9%
	Heterogeneous	TRU	RH	100.0%
	Solidified Inorganics	MTRU	CH	30.0%
	Solidified Inorganics	TRU	CH	70.0%
	Uncategorized Metal	MTRU	CH	100.0%

Information Only



**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: LA

**WASTE PARAMETERS FOR Heterogeneous Waste**

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
LA-T03	581.50	3243.80	3825.30
LA-W043	1183.60	0.00	1183.60
LA-W039	276.37	1433.18	1709.55
	<b>2041.47</b>	<b>4676.98</b>	<b>6718.46</b>

**Material Parameters (kg/m3)**

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys	1716.35	54.76	0.00
	Aluminum-based Metals/Alloys	1.63	0.16	0.00
	Other Metals	21.25	7.84	0.00
	Other Inorganic Materials	24.04	4.32	0.00
Organics	Cellulosics	184.81	72.80	0.00
	Rubber	17.88	4.64	0.00
	Plastics	149.04	39.18	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix	2.98	0.01	0.00
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Lead/Cadmium Metal Waste**

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
LA-W042	158.50	0.00	158.50
LA-W037	2050.73	1623.75	3674.48
	<b>2209.23</b>	<b>1623.75</b>	<b>4032.98</b>

**Material Parameters (kg/m3)**

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Inorganic Materials			
Organics	Cellulosics			
	Rubber			
	Plastics			
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

**WASTE PARAMETERS FOR Solidified Inorganic Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
LA-W046	148.10	0.00	148.10
LA-W044	2868.30	0.00	2868.30
LA-W041	1088.29	0.00	1088.29
LA-W040	183.91	229.73	413.64
LA-W038	15.20	127.45	142.65
LA-W036	115.87	2.09	117.96
LA-W034	110.06	18.32	128.38
LA-T01	1744.50	9731.30	11475.80
	<b>6274.23</b>	<b>10108.89</b>	<b>16383.12</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
<b>Organics</b>	Other Inorganic Materials			
	Cellulosics			
	Rubber			
<b>Solidified Materials</b>	Plastics			
	Inorganic Matrix	1288.27	1006.24	0.00
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Unspecified Metal Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
LA-W036	15.05	0.00	15.05
	<b>15.05</b>	<b>0.00</b>	<b>15.05</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	931.37	254.42	0.00
	Aluminum-based Metals/Alloys	9.86	2.69	0.00
	Other Metals	44.45	12.14	0.00
<b>Organics</b>	Other Inorganic Materials	5.29	0.96	0.00
	Cellulosics	0.12	0.06	0.00
	Rubber	180.31	88.71	0.00
<b>Solidified Materials</b>	Plastics	0.02	0.01	0.00
	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: LA

**WASTE PARAMETERS FOR Heterogeneous Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
LA-T82	78.40	930.00	1008.40
	<b>78.40</b>	<b>930.00</b>	<b>1008.40</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Inorganic Materials	24.04	2.41	0.00
<b>Organics</b>	Cellulosics	184.81	80.91	0.00
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	2.98	0.01	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

Information Only

**Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes**

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
------	-------------	--------------------	----------	---------

LB

Unknown

E

TRU

CH

100.0%

L

I

M

I

N

A

R

Y

Information Only

2411

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: LB

**WASTE PARAMETERS FOR Unknown Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
LB-T01	0.00	2.30	2.30
	0.00	2.30	2.30

**Material Parameters (kg/m3)**

	<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>			
Iron-based Metals/Alloys			
Aluminum-based Metals/Alloys			
Other Metals			
Other Inorganic Materials			
<b>Organics</b>			
Cellulosics			
Rubber			
Plastics			
<b>Solidified Materials</b>			
Inorganic Matrix			
Organic Matrix			
<b>Soils</b>			
Soil			
<b>Packaging Materials</b>			
Steel		141.83	
Plastic		39.42	

Information Only

**Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes**

Site	Matrix_Name	Mixed or Non Mixed	CH or RH	Percent
LL	Categorized Metal	MTRU	CH	100.0%
	Heterogeneous	TRU	CH	100.0%
	Solidified Inorganics	MTRU	CH	4.5%
	Solidified Inorganics	TRU	CH	95.5%
	Solidified Organics	MTRU	CH	100.0%

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: LL

**WASTE PARAMETERS FOR Heterogeneous Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
LL-T02	110.50	809.50	920.00
	110.60	809.50	920.00

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Lead/Cadmium Metal Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
LL-W018	1.00	28.00	29.00
	1.00	28.00	29.00

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	256.10	256.10	0.00
	Aluminum-based Metals/Alloys	27.77	27.77	0.00
	Other Metals	24.68	24.68	0.00
	Other Inorganic Materials	29.28	29.28	0.00
<b>Organics</b>	Cellulosics	45.27	7.43	0.00
	Rubber			
	Plastics	67.57	15.09	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only

4190

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

**WASTE PARAMETERS FOR Solidified Inorganic Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
LL-T01	110.50	809.50	920.00
LL-W020	1.50	42.00	43.50
	<b>112.00</b>	<b>851.50</b>	<b>963.50</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
Organics	Other Inorganic Materials			
	Cellulosics			
	Rubber			
Solidified Materials	Plastics			
	Inorganic Matrix	1057.69	35.81	346.15
Soils	Organic Matrix			
	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Solidified Organic Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
LL-W018	0.75	21.00	21.75
	<b>0.75</b>	<b>21.00</b>	<b>21.75</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
Organics	Other Inorganic Materials			
	Cellulosics			
	Rubber			
Solidified Materials	Plastics			
	Inorganic Matrix			
Soils	Organic Matrix	1134.62	923.08	350.96
	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

500



**Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes**

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
MD	Combustible	MTRU	CH	1.5%
	Combustible	TRU	CH	98.5%
	Solidified Inorganics	MTRU	CH	1.7%
	Solidified Inorganics	TRU	CH	98.3%

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: MD

**WASTE PARAMETERS FOR Combustible Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
MD-T02	56.60	27.90	84.50
MD-W003	1.10	0.23	1.33
	<b>57.70</b>	<b>28.13</b>	<b>85.83</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals	913.46	302.14	0.00
	Other Inorganic Materials	144.23	0.45	0.00
<b>Organics</b>	Cellulosics	10.10	0.09	0.00
	Rubber	464.42	4.10	0.00
	Plastics	30.29	0.27	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Solidified Inorganic Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
MD-T01	84.80	27.90	112.70
MD-W002	2.00	0.00	2.00
	<b>86.80</b>	<b>27.90</b>	<b>114.70</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix	630.29	10.99	0.00
	Organic Matrix	1134.62	906.98	350.96
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
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MU	Heterogeneous	MTRU	CH	100.0%
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Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: MU

**WASTE PARAMETERS FOR Heterogeneous Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
MU-W802	0.08	0.48	0.56
	<b>0.08</b>	<b>0.48</b>	<b>0.56</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Inorganic Materials	24.04	2.41	0.00
<b>Organics</b>	Cellulosics	184.81	80.91	0.00
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	2.98	0.01	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only

Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
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NT	Heterogeneous	MTRU	CH	100.0%
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Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: NT

**WASTE PARAMETERS FOR Heterogeneous Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
NT-W001	612.00	0.00	612.00
	<b>612.00</b>	<b>0.00</b>	<b>612.00</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Inorganic Materials	24.04	2.41	0.00
<b>Organics</b>	Cellulosics	184.81	80.91	0.00
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	2.98	0.01	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only

**Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes**

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
OR	Heterogeneous	MTRU	CH	61.3%
	Heterogeneous	TRU	CH	38.7%
	Heterogeneous	MTRU	RH	89.6%
	Heterogeneous	TRU	RH	10.4%
	Solidified Inorganics	MTRU	CH	62.6%
	Solidified Inorganics	TRU	CH	37.4%
	Solidified Inorganics	MTRU	RH	100.0%
	Unknown	TRU	RH	100.0%

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: OR

**WASTE PARAMETERS FOR Heterogeneous Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
OR-T03	258.10	336.30	594.40
OR-W044	511.00	273.00	784.00
OR-W045.2	4.70	0.00	4.70
OR-W047	154.50	0.00	154.50
	<b>928.30</b>	<b>609.30</b>	<b>1537.60</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Inorganic Materials	24.04	2.41	0.00
<b>Organics</b>	Cellulosics	184.81	80.91	0.00
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	2.98	0.01	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Solidified Inorganic Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
OR-T01	28.70	37.30	66.00
OR-W042	110.00	0.00	110.00
OR-W045.1	0.50	0.00	0.50
	<b>139.20</b>	<b>37.30</b>	<b>176.60</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	1716.35	36.23	0.00
	Aluminum-based Metals/Alloys	1.63	0.00	0.00
	Other Metals	21.25	0.01	0.00
	Other Inorganic Materials	24.04	0.91	0.00
<b>Organics</b>	Cellulosics	184.81	30.49	0.00
	Rubber	17.88	2.77	0.00
	Plastics	149.04	24.45	0.00
<b>Solidified Materials</b>	Inorganic Matrix	1057.69	494.39	346.15
	Organic Matrix	2.98	0.01	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only



**SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: OR

**WASTE PARAMETERS FOR Heterogeneous Waste**

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
OR-W040	462.00	198.00	660.00
OR-T04	35.90	40.30	76.20
	497.90	238.30	736.20

**Material Parameters (kg/m3)**

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Inorganic Materials	24.04	2.41	0.00
Organics	Cellulosics	184.81	80.91	0.00
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix	2.98	0.01	0.00
Soils	Soil			
Packaging Materials	Steel		2600.00	
	Lead		460.00	

**WASTE PARAMETERS FOR Solidified Inorganic Waste**

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
OR-W046	605.00	180.00	785.00
	605.00	180.00	785.00

**Material Parameters (kg/m3)**

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
Organics	Cellulosics			
	Rubber			
	Plastics			
Solidified Materials	Inorganic Matrix	1057.69	783.27	346.15
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		2600.00	
	Lead		460.00	

## SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)

30-Jun-94

### WASTE PARAMETERS FOR Unknown Waste

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
OR-T03	43.90	49.30	93.20
	<b>43.90</b>	<b>49.30</b>	<b>93.20</b>

### Material Parameters (kg/m3)

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	1716.35	96.15	0.00
	Aluminum-based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Inorganic Materials	24.04	2.41	0.00
<b>Organics</b>	Cellulosics	184.81	80.91	0.00
	Rubber	17.88	7.36	0.00
	Plastics	149.04	64.90	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	2.98	0.01	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

Information Only

Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
PA	Solidified Inorganics	MTRU	CH	100.0%
	Unknown	MTRU	CH	100.0%

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: PA

**WASTE PARAMETERS FOR Solidified Inorganic Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
PA-W014	18.75	0.00	18.75
	18.75	0.00	18.75

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix	1057.69	793.27	346.15
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Unknown Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
PA-W015	6.00	0.00	6.00
	6.00	0.00	6.00

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only

**Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes**

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
RF	Categorized Metal	MTRU	CH	100.0%
	Combustible	MTRU	CH	13.9%
	Combustible	TRU	CH	86.1%
	Filter	MTRU	CH	19.8%
	Filter	TRU	CH	80.2%
	Graphite	MTRU	CH	100.0%
	Heterogeneous	MTRU	CH	13.6%
	Heterogeneous	TRU	CH	86.4%
	Inorganic Non-Metal	MTRU	CH	100.0%
	Salt Waste	MTRU	CH	100.0%
	Solidified Inorganics	MTRU	CH	45.7%
	Solidified Inorganics	TRU	CH	54.3%
	Solidified Organics	MTRU	CH	100.0%
	Uncategorized Metal	MTRU	CH	0.8%
	Uncategorized Metal	TRU	CH	99.2%

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: RF

**WASTE PARAMETERS FOR Combustible Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
RF-W041	27.70	9.35	37.05
RF-W029	20.16	11.90	32.06
RF-T03	239.10	187.30	426.40
	<b>286.96</b>	<b>208.55</b>	<b>495.51</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals	913.46	296.18	0.00
	Other Inorganic Materials	144.23	4.02	0.00
<b>Organics</b>	Cellulosics	10.10	0.80	0.00
	Rubber	464.42	37.01	0.00
	Plastics	30.29	2.41	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Filter Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
RF-T05	486.40	437.10	923.50
RF-W067	125.43	4.65	130.08
RF-W066	81.23	16.70	97.93
	<b>693.06</b>	<b>458.45</b>	<b>1151.51</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	24.04	0.54	0.00
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	1418.27	410.05	0.00
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics	38.46	9.41	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

**WASTE PARAMETERS FOR Graphite Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
RF-W068	0.42	0.00	0.42
	0.42	0.00	0.42

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	1673.08	115.38	0.00
Organics	Cellulosics			
	Rubber			
	Plastics			
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Heterogeneous Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
RF-W036	0.84	1.05	1.89
RF-T04	1255.60	1061.50	2317.10
RF-W026	0.21	0.00	0.21
RF-W012	236.91	124.40	361.31
	1493.56	1186.95	2680.51

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
Inorganics	Iron-based Metals/Alloys	256.10	221.38	0.00
	Aluminum-based Metals/Alloys	27.77	24.01	0.00
	Other Metals	24.68	21.34	0.00
	Other Inorganic Materials	961.54	25.69	0.00
Organics	Cellulosics	576.85	22.08	0.00
	Rubber	47.84	1.50	0.00
	Plastics	84.42	17.57	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Information Only

## SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)

30-Jun-94

### WASTE PARAMETERS FOR Inorganic Non-metal Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
RF-W052	14.90	3.50	18.40
RF-W008	1.89	0.00	1.89
RF-W032	2.11	5.85	7.96
RF-W067	0.63	3.50	4.13
RF-W066	193.40	0.00	193.40
	<b>212.93</b>	<b>12.85</b>	<b>225.78</b>

#### Material Parameters (kg/m3)

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	3072.12	495.40	0.00
Organics	Cellulosics	12.02	0.32	0.00
	Rubber	1.10	0.13	0.00
	Plastics	19.82	2.42	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil	144.23	0.54	0.00
Packaging Materials	Steel		141.83	
	Plastic		39.42	

### WASTE PARAMETERS FOR Lead/Cadmium Metal Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
RF-W028	3.78	3.10	6.88
RF-W011	73.48	44.75	118.23
	<b>77.26</b>	<b>47.85</b>	<b>125.11</b>

#### Material Parameters (kg/m3)

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys	256.10	242.02	0.00
	Aluminum-based Metals/Alloys	27.77	26.24	0.00
	Other Metals	913.46	39.98	0.00
	Other Inorganic Materials	29.28	27.67	0.00
Organics	Cellulosics	45.27	7.02	0.00
	Rubber			
	Plastics	67.57	14.26	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	



**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

**WASTE PARAMETERS FOR Salt Waste**

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
RF-W068	754.30	0.00	754.30
	<b>754.30</b>	<b>0.00</b>	<b>754.30</b>

**Material Parameters (kg/m3)**

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys	14.42	12.02	0.48
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	567.30	216.30	48.10
Organics	Cellulosics			
	Rubber			
	Plastics			
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Solidified Inorganic Waste**

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
RF-W038	1.26	26.25	27.51
RF-W040	1202.00	0.00	1202.00
RF-W010	143.43	14.00	157.43
RF-T01	1257.90	1123.90	2381.80
RF-W069	460.50	0.00	460.50
RF-W065	0.21	0.00	0.21
RF-W063	36.25	13.75	50.00
RF-W068	61.45	0.00	61.45
RF-W076	69.64	0.00	69.64
	<b>3232.64</b>	<b>1177.90</b>	<b>4410.54</b>

**Material Parameters (kg/m3)**

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
Organics	Cellulosics			
	Rubber			
	Plastics			
Solidified Materials	Inorganic Matrix	2012.02	629.02	164.90
	Organic Matrix	1418.27	7.50	519.23
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

WASTE PARAMETERS FOR Solidified Organic Waste

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
RF-W013	111.30	9.50	120.80
RF-W069	12.80	0.00	12.80
	<b>124.10</b>	<b>9.60</b>	<b>133.60</b>

Material Parameters (kg/m3)

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	2012.02	894.52	164.90
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

WASTE PARAMETERS FOR Unspecified Metal Waste

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
RF-W037	5.46	0.00	5.46
RF-T02	362.25	312.20	674.45
	<b>367.71</b>	<b>312.20</b>	<b>679.91</b>

Material Parameters (kg/m3)

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	317.31	83.65	0.00
	Aluminum-based Metals/Alloys			
	Other Metals	1586.54	195.19	0.00
	Other Inorganic Materials	19.23	19.23	0.00
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes**

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
RL	Categorized Metal	MTRU	CH	100.0%
	Heterogeneous	MTRU	CH	2.4%
	Heterogeneous	TRU	CH	97.6%
	Heterogeneous	TRU	RH	100.0%
	Inorganic Non-Metal	TRU	RH	100.0%
	Soils	MTRU	CH	3.7%
	Soils	TRU	CH	96.3%
	Solidified Inorganics	MTRU	CH	2.2%
	Solidified Inorganics	TRU	CH	97.8%
	Solidified Inorganics	TRU	RH	100.0%
	Solidified Organics	MTRU	CH	100.0%

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: RL

**WASTE PARAMETERS FOR Heterogeneous Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
RL-W077	4.64	3.17	7.81
RL-T03	8907.00	2907.40	11814.40
RL-W072	7.98	5.47	13.45
RL-W074	30.45	20.79	51.24
RL-W075	4.82	3.28	8.10
RL-W081	0.42	0.29	0.71
RL-W086	5.32	3.65	8.97
RL-W085	2.10	1.44	3.54
RL-W080	26.91	1.94	28.85
RL-W101	2.10	169.33	171.43
	<b>8991.74</b>	<b>3116.76</b>	<b>12108.50</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	432.69	1.00	0.00
	Aluminum-based Metals/Alloys	27.77	0.04	0.00
	Other Metals	913.46	0.76	0.00
	Other Inorganic Materials	290.75	1.42	0.00
<b>Organics</b>	Cellulosics	576.85	114.76	0.00
	Rubber	96.26	11.05	0.00
	Plastics	155.00	33.12	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

**WASTE PARAMETERS FOR Lead/Cadmium Metal Waste**

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
RL-W083	0.57	0.04	0.61
RL-W078	0.63	33.43	34.06
RL-W079	0.42	22.30	22.72
RL-W082	0.21	0.02	0.23
	1.83	55.79	57.62

**Material Parameters (kg/m3)**

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys	256.10	252.37	0.00
	Aluminum-based Metals/Alloys	27.77	27.37	0.00
	Other Metals	913.46	28.74	0.00
	Other Inorganic Materials	29.28	28.85	0.00
	Organics	Cellulosics	45.27	7.32
Rubber				
Plastics		67.57	14.87	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Soil**

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
RL-T02	4586.80	2907.40	7494.20
RL-W133	11.97	274.00	285.97
	4598.77	3181.40	7780.17

**Material Parameters (kg/m3)**

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys	0.57	0.02	0.00
	Aluminum-based Metals/Alloys			
	Other Metals	0.15	0.00	0.00
	Other Inorganic Materials	3072.12	562.87	0.00
Organics	Cellulosics	12.02	11.60	0.00
	Rubber			
	Plastics	12.02	11.58	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil	671.46	83.27	0.00
Packaging Materials	Steel		141.83	
	Plastic		39.42	

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

**WASTE PARAMETERS FOR Solidified Inorganic Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
RL-W136	2.02	107.00	109.02
RL-Y01	1987.00	2907.40	4894.40
	<b>1989.02</b>	<b>3014.40</b>	<b>5003.42</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys	1716.35	96.57	0.00
	Aluminum-based Metals/Alloys	1.63	0.01	0.00
	Other Metals	21.25	0.03	0.00
	Other Inorganic Materials	101.11	3.42	0.00
<b>Organics</b>	Cellulosics	184.81	79.16	0.00
	Rubber	96.26	7.35	0.00
	Plastics	155.00	63.85	0.00
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	2.98	0.01	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Solidified Organic Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
RL-W134	0.42	22.06	22.48
	<b>0.42</b>	<b>22.06</b>	<b>22.48</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix	75.00	75.00	0.00
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: RL

**WASTE PARAMETERS FOR Heterogeneous Waste**

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
RL-T06	0.00	1227.40	1227.40
RL-T04	201.00	1227.40	1428.40
	<b>201.00</b>	<b>2454.80</b>	<b>2655.80</b>

**Material Parameters (kg/m3)**

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys	1716.35	170.08	0.00
	Aluminum-based Metals/Alloys	27.77	12.84	0.00
	Other Metals	24.68	11.42	0.00
	Other Inorganic Materials	29.28	14.83	0.00
Organics	Cellulosics	184.81	46.95	0.00
	Rubber	17.88	3.96	0.00
	Plastics	149.04	41.88	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix	2.98	0.01	0.00
Soils	Soil			
Packaging Materials	Steel		2600.00	
	Lead		460.00	

**WASTE PARAMETERS FOR Inorganic Non-metal Waste**

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
RL-T07	0.00	1227.40	1227.40
	<b>0.00</b>	<b>1227.40</b>	<b>1227.40</b>

**Material Parameters (kg/m3)**

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	572.12	572.12	0.00
Organics	Cellulosics	24.04	24.04	0.00
	Rubber			
	Plastics	24.04	24.04	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		2600.00	
	Lead		460.00	

## SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)

30-Jun-94

### WASTE PARAMETERS FOR Solidified Inorganic Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
RL-T08	0.00	1227.40	1227.40
	0.00	1227.40	1227.40

### Material Parameters (kg/m3)

	Max	Average	Min
<b>Inorganics</b>			
Iron-based Metals/Alloys			
Aluminum-based Metals/Alloys			
Other Metals			
Other Inorganic Materials	290.75	290.75	0.00
<b>Organics</b>			
Cellulosics	1.10	1.10	0.00
Rubber	1.10	1.10	0.00
Plastics	19.82	19.82	0.00
<b>Solidified Materials</b>			
Inorganic Matrix			
Organic Matrix			
<b>Soils</b>			
Soil			
<b>Packaging Materials</b>			
Steel		2600.00	
Lead		460.00	

Information Only



**Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes**

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
SA	Unknown	TRU	CH	100.0%
	Unknown	MTRU	RH	100.0%

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: SA

**WASTE PARAMETERS FOR Unknown Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
SA-T01	0.00	46.00	46.00
	0.00	46.00	46.00

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

Information Only

**SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: SA

**WASTE PARAMETERS FOR Unknown Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
SA-W134	0.95	0.00	0.95
	0.95	0.00	0.95

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

Information Only

**Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes**

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
SR	Categorized Metal	TRU	CH	100.0%
	Heterogeneous	MTRU	CH	100.0%
	Solidified Inorganics	MTRU	CH	100.0%
	Solidified Organics	MTRU	CH	1.0%
	Solidified Organics	TRU	CH	99.0%

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## SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)

30-Jun-94

DOE TRU SITE: SR

### WASTE PARAMETERS FOR Combustible Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
SR-T02	4747.10	2986.60	7733.70
	4747.10	2986.60	7733.70

### Material Parameters (kg/m3)

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	4.23	1.10	0.00
Organics	Cellulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

### WASTE PARAMETERS FOR Heterogeneous Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
SR-W027	4955.50	0.00	4955.50
SR-W026	66.90	5813.00	5879.90
	5022.40	5813.00	10835.40

### Material Parameters (kg/m3)

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials	4.23	1.10	0.00
Organics	Cellulosics	576.85	115.83	0.00
	Rubber	47.84	11.11	0.00
	Plastics	84.42	33.32	0.00
Solidified Materials	Inorganic Matrix			
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

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509

## SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)

30-Jun-94

### WASTE PARAMETERS FOR Solidified Inorganic Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
SR-W053	0.02	0.00	0.02
	0.02	0.00	0.02

#### Material Parameters (kg/m3)

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
Organics	Cellulosics			
	Rubber			
	Plastics			
Solidified Materials	Inorganic Matrix	2012.02	625.00	164.90
	Organic Matrix			
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

### WASTE PARAMETERS FOR Solidified Organic Waste

WASTE STREAM ID	RETRIEVABLY STORED (m3)	PROJECTED (m3)	TOTAL PER STREAM (m3)
SR-W006	0.03	0.00	0.03
SR-T01	198.20	124.40	322.60
SR-W044	3.25	0.00	3.25
	201.48	124.40	325.88

#### Material Parameters (kg/m3)

		Max	Average	Min
Inorganics	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
Organics	Cellulosics			
	Rubber			
	Plastics			
Solidified Materials	Inorganic Matrix			
	Organic Matrix	1134.62	323.08	350.96
Soils	Soil			
Packaging Materials	Steel		141.83	
	Plastic		39.42	

Volume % of Non Mixed and Mixed TRU Waste by Matrix Name for CH and RH Wastes

Site	Matrix Name	Mixed or Non Mixed	CH or RH	Percent
WV	Categorized Metal	MTRU	CH	7.1%
	Categorized Metal	TRU	CH	92.9%
	Solidified Inorganics	MTRU	CH	1.1%
	Solidified Inorganics	TRU	CH	98.9%
	Unknown	TRU	RH	100.0%

Information Only

**SITE-SPECIFIC CONTACT HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: WV

**WASTE PARAMETERS FOR Lead/Cadmium Metal Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
WV-T02	28.70	0.00	28.70
WV-W024	2.19	0.00	2.19
	<b>30.89</b>	<b>0.00</b>	<b>30.89</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals	913.46	302.88	76.92
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

**WASTE PARAMETERS FOR Solidified Inorganic Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
WV-W041	0.10	0.10	0.21
WV-T01	19.20	0.00	19.20
	<b>19.30</b>	<b>0.10</b>	<b>19.41</b>

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
	Other Inorganic Materials			
<b>Organics</b>	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix	2012.02	625.00	184.90
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		141.83	
	Plastic		39.42	

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**SITE-SPECIFIC REMOTE HANDLED WASTE PROFILES (contd)**

30-Jun-94

DOE TRU SITE: WV

**WASTE PARAMETERS FOR Unknown Waste**

<u>WASTE STREAM ID</u>	<u>RETRIEVABLY STORED (m3)</u>	<u>PROJECTED (m3)</u>	<u>TOTAL PER STREAM (m3)</u>
WV-T03	499.20	0.00	499.20
	499.20	0.00	499.20

**Material Parameters (kg/m3)**

		<u>Max</u>	<u>Average</u>	<u>Min</u>
<b>Inorganics</b>	Iron-based Metals/Alloys			
	Aluminum-based Metals/Alloys			
	Other Metals			
<b>Organics</b>	Other Inorganic Materials			
	Cellulosics			
	Rubber			
	Plastics			
<b>Solidified Materials</b>	Inorganic Matrix			
	Organic Matrix			
<b>Soils</b>	Soil			
<b>Packaging Materials</b>	Steel		2600.00	
	Lead		460.00	

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**APPENDIX G**

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Justification of Waste Parameters

Waste Parameter	Input Variable in <u>Current</u> PA Models		Input Variable in PA Model <u>Under Development</u>	Input Variable in Possible <u>Future</u> PA Model	Remaining Matrix Variable to Provide Overall Waste Form Information
Iron-Based Metals and Alloys	X	X	X	X	
Aluminum-Based Metals and Alloys		X	X	X	
Other Metals		X		X	
Other Inorganics		X	X	X	
Cellulosics	X	X	X	X	
Plastics		X	X	X	
Rubbers	1/2	X	X	X	
Solidified Inorganics		X	X	X	
Solidified Organics Matrix		X	X	X	
Soils		X	?	?	

GAS GENERATION
   
 MECHANICAL CHARACTERISTICS

## Sandia National Laboratories

Managed and Operated by Sandia Corporation  
a subsidiary of Martin Marietta Corporation  
Albuquerque, New Mexico 87185-1328

date : June 24, 1994  
to : P.E. Drez, [Drez Environmental Associates]  
from :   
L. C. Sanchez, Org 6342, MS-1328 (505)848-0685  
subject : Comments on May 9, 1994 Communications

The following is a synopsis of communications that took place on May 9, 1994 [1]. In those communications you requested responses to the following two questions:

- [1] In the radionuclide table (Table 3-3.1) located in SAND92-0700/3, there are a series of radionuclide inventories listed by isotope. This is the list that we have to replace in the WTWBIR. On the list, I thought that only isotopes with half-lives greater than 20 years were listed, but for instance, Cf-252 is listed which has a half-life of 2.64 years. Is this because it decays to Cm-248, which has a long half life? There are other isotopes which have half-lives greater than 20 years which are not reported in Table 3-3.1. Is this because of their overall low curie content in the inventory? If so what is the "cut-off" used as to whether an isotope appears in the table?
- [2] One of the strong comments by Karen Knudtsen was that we need to put in a strong justification for the different waste parameters that will be documented in the inventory. Can one or both of you work with the PA and model development people (e.g., Larry Brush) and fill in the table attached?

Per your request [1] I had talked with several people to get responses to your two questions. The responses obtained on May 9, 1994 and relayed to you were [2]:

- [1] In talking to Andy Peterson, he said that the table of radionuclides (Table 3.3-1) is a synopsis of all the available data from the sites. Any radionuclides not reported were probably due to the sites: 1) not identifying them in the waste, 2) they had been of undetectable quantities, etc. Also, the decay chains of interest (Figure 3.3-5) were those identified by SNL scientists as being the chains of interest.
- [2] The matrix which identifies the justification of waste parameters was reviewed by (see attachment):

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Matrix Column	Reviewer
Current Models	Palmer Vaughn Andy Peterson Jim Schreiber Barry Butcher
Under Development	Larry Brush
Possible Future	Larry Brush
Overall	(none)

**REFERENCES**

- [1] Informal Communications from P.E. Drez [Drez Environmental Associates] to R.D. Waters (Dept. 6622) and L.C. Sanchez (Dept. 6342) dated May 9, 1994.
- [2] Informal Communications from L.C. Sanchez (Dept. 6342) to P.E. Drez [Drez Environmental Associates] dated May 9, 1994.

LCS:6342:lcs(94-2029)

Copy to (with attachment):

- MS-1328, D.R. Anderson [Dept. 6342]
- MS-1328, M.G. Marietta [Dept. 6342]
- MS-1328, J.D. Schreiber [Dept. 6342]
- MS-1328, P. Vaughn [Dept. 6342]
- MS-1341, B.M. Butcher [Dept. 6345]
- MS-1341, L.H. Brush [Dept. 6348]
- MS-1341, A.C. Peterson [Dept. 6348]
- MS-1328, Day File [Dept. 6342]
- MS-1328, L.C. Sanchez [Dept. 6342]

## APPENDIX H

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### MWIR WASTE STREAM QUESTIONNAIRE

RF-W012	Combustibles/TRM
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#### 1. General Site Information

##### 1.1 Location

A. Site ID: RF  
B. Site Name: Rocky Flats Plant  
C. DOE Field Office: Rocky Flats  
D. Data Base WS ID: RF-W012

##### 1.2 Points of Contact

A. Primary: Bob Griffis  
Address: Rocky Flats Plant  
P.O. Box 464, Bldg. T130C  
Golden, Colorado 80402-0464

Phone: 303-966-4934  
Fax: 303-966-6406  
E-Mail:

B. Alternate: Scott Anderson  
Address:

Phone: 303-273-6164  
Fax: 303-273-6245  
E-Mail:

#### 2. Waste Stream Description and Source

##### 2.1 Waste Stream Identifiers

A. Waste stream site ID: None

B. Waste stream IMWIR ID: 118

C. Waste stream name: Combustibles/TRM

##### D. Previous waste stream IDs and names:

WS ID	Waste Stream Name
IDC 330	Combustibles, Dry
IDC 336	Combustibles Wet

RF-W012	Combustibles/TRM
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2.1 Waste Stream Identifiers (continued)

D. Previous waste stream IDs and names (continued):

WS ID	Waste Stream Name
IDC 337	Plastic
IDC 831	Combustibles, dry (TRU Mixed)
IDC 832	Combustibles, wet (TRU Mixed)
IDC 833	Plastic (TRU Mixed)

Information Only



RF-W012	Combustibles/TRM
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**2.1 Waste Stream Identifiers (continued)**

**E. Ignore this waste (IMWIR waste that is being revised):** No  
If yes.. then complete the following and ignore the remain

**F. IDs for the newly defined waste streams:**

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**2.2 Waste Stream Description**

IDC NO. 330, 336, 337, 831, 832, 833. The waste consists mainly of cloth and paper products from cleanup of gloveboxes and spills, involving hazardous solvents. The bulk of these wastes are packaged in 55-gallon drums with one rigid polyethylene liner and several bag liners. In addition, the waste may be repackaged into DOT 7A, Type A metal boxes which are lined with a fiberboard and PVC liner. Inventory data include mixed residues within the same IDCs.

IDC 325 This IDC is a combination of any solid waste IDCs, i.e., combustibles, metal, glass, construction rubble, etc. This IDC may be used for waste originated outside the PA only, with the exception of the waste generated during Engineered and Maintenance non-routine work, i.e., Stripout Activity in Bldg 881 and it may not be used anytime for waste originated in Bldg 886. Mixed Waste.

IDC 330 no description available.

IDC 336 - Wet combustibles are paper, cloth, etc., which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent an accumulation of free liquid. This IDC changes to 822, 832, 852, or 862 at the point of assay.

IDC831 - Dry combustibles such as paper, cloth, wood, etc. This waste has been identified as being low level mixed waste.

IDC 832 - Wet combustibles are paper, cloth, etc., which contain a discernible amount of moisture. these must be drained or wrung prior to packaging to prevent accumulation of free liquid.

**2.3 Generation Site**

- A. Generation site name:** Rocky Flats Plant
- B. Buildings and areas where waste generation activities are located:**

Numerous locations throughout RFP.

RF-W012

Combustibles/TRM

## 2.2 Waste Stream Description (continued)

~~IDC 833 - PVC sheeting, poly bottles, supplied air suits, and other plastics. This waste has been identified as being a low level mixed waste.~~

This waste consists of rags, paper, cloth, coveralls, plastics, rubber, and wood from the cleanup of spills and equipment.

Halogenated organics are used at RFP for degreasing. Methylene chloride is used for paint removal. Ignitables are characteristic of the solvents and/or filter media. The combustibles can be used for cleaning with these organics or used for the cleanup of spent solvents. Not all of the waste in the IDCs listed in the previous section contain solvents, but the nonsolvent waste is not segregated from the solvent bearing waste at this time. Therefore, all containers of waste with the above-mentioned IDCs are considered RCRA waste and LDR. No TCLP analysis of these wastes has been conducted at this time.

RF-W012	Combustibles/TRM
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3 Generation Site (continued)

C. Operations performed in buildings:

D. Process generating waste:

This waste consists of rags, paper, cloth, coveralls, plastic, rubber, and wood. The waste consists mainly of cloth and paper products from cleanup of gloveboxes and spills. The bulk of these wastes are packaged in 55-gallon drums with one rigid polyethylene liner and several bag liners. In addition, the waste may be packaged in DOT 7A Type A metal boxes which are lined with a fiberboard liner and a PVC liner or standard TRUPACT-II container. The containers are then assayed and transferred to interim status storage areas. These wastes have been shipped to the INEL for storage in the past.

RF-W012	Combustibles/TRM
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2.3 Generation Site (continued)

E. Source classification:

Applicable Sources of the Waste Stream			
Research and Development	Yes	Environmental Restoration	No
Operations Waste	Yes	Buried	No
Residues	Yes	Treatment of Waste	No
Retrieveably Stored Waste	No	Moratorium Waste	No
Decontamination and Decommissioning	Yes	Maintenance	Yes
EPA Source Code	A19		
EPA Waste Source	Other cleaning and degreasing		

2.4 Reclassification

A. Waste type: MTRU

B. Reclassified waste (< 100nCi/g of TRU): No

C. If waste is MTRU..

UNKNOWN

D. Reclassification..

it could be reclassified:  
or potential for reclassification:

Rocky Flats assays wastes to determine waste type instead of relying on process knowledge or historical data. For this reason, the potential for reclassification has not been analyzed.

RF-W012	Combustibles/TRM
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**3. Radiation Acceptance**

**3.1 Waste Radiation Characteristics**

- A. Handling: CH
- B. Transuranic alpha emitter: >100  
Units: nCi/g
- C. Uranium/thorium alpha level: NC  
Units:
- D. Beta/gamma dose rate at the surface: NC  
Units:
- E. Beta/gamma dose rate 1m from the surface: NC  
Units:
- F. Surface neutron activity: NC  
Units:

**3.2 Radionuclides**

- A. Estimate of the uncertainty of radioactive concentration value and description of methods used to measure radioactive elements:

Concentrations based upon non-destructive analysis of waste packages. Process knowledge is also applied. The purpose of this assay is to determine whether the waste is above or below TRU threshold of 100 nCi per gram. Pu and U and their decay daughters, the only isotopes known to be used at RFP, are in the wastes.

Measurement Method: Passive-Active Counter / Crate Counter





RF-W012	Combustibles/TRM
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**3.4 Radionuclide Contamination Accessibility**

- A. External surface only: No
- B. Internal surface only: No
- C. Contamination dispersed through matrix: Yes

**4. Matrix**

**4.1 Overall Composite Matrix**

- A. Waste matrix code: 5440
- B. Waste matrix name: Predominantly Combustible Debris

**4.2 Specific Matrix Constituents**

- A. Percent is by weight or volume:
- B. Sum: 0
- C. Waste matrix type:

WM Code	Matrices/Constituent Name	Average %	Lower Limit %	Upper Limit %
5330	Paper and rags	UNK		
5320	Wood Debris	UNK		
5390	Non-halogenated organic solids	UNK		
5310	Plastics and rubber	UNK		
5190	Metals	UNK		
5220	Glass	UNK		

Information Only



RF-W012	Combustibles/TRM
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**4.3 Cation/Anion**

A. Cations and anions present in the waste and ..

if available

Not applicable

**4.4 Previous Treatment**

- A. Waste stream has been super-compacted: No
- B. Waste stream has been shredded: No
- C. Waste stream has been immobilized at the container level: No
- D. Waste stream has been immobilized in sizes less than container level: No
- E. Waste stream has been treated: No  
If yes.. treatment was for LDR:
- F. Waste stream can be removed easily from its container: Yes

**4.5 Other Waste Characteristics (for Aqueous Streams Only)**

- A. Total dissolved solids (%):
- B. Total suspended solids (%):
- C. Total organic content (%):
- D. pH:

Information Only

RF-W012	Combustibles/TRM
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**4.5 Other Waste Characteristics (continued)**

**E. Other waste characteristics:**

No information available

**5. Regulated Characteristics and Contaminants**

**5.1 Characterization Basis**

**A. Uncertainty of the contamination concentration value:**

A- Process knowledge based upon general knowledge of waste type or source.

Information Only

RF-W012	Combustibles/TRM
---------	------------------

5.1 Characterization Basis (continued)

- B. Sampling program was a statistical program that was based on random sampling: No
- C. Concerning waste streams for which sampling and analysis has been initiated..  
approximate percentage of waste containers sampled:
- D. Total number of samples that have been analyzed:

5.2 Contaminant List

EPA Code	Contaminant Name	Typical	Lower Limit	Upper Limit	Unit	Basis	TCLP Level
F001	I..			1..		A	
F001	Carbon Tetrachloride					A	
F002	Freon					A	
F002	Methylene Chloride					A	
F005A	Toluene					A	
F005A	Methyl ethyl ketone					A	

RF-W012	Combustibles/TRM
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5.3 Plating Contaminants for F006 - F009 Wastes

Metal/Cyanide	Typical	Lower Limit	Upper Limit	Units

Information Only

RF-W012	Combustibles/TRM
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4 PCBs

- A. PCB concentration (ppm): 0
- B. Portion of waste containing PCBs (%):
- C. If not 100%..

the PCBs are segregated and can be treated

5.5 Asbestos

- A. Waste stream contains asbestos: No
- B. For known or potential presence of asbestos.. for determining the quantity present:

the conditi

6. Waste Inventory/Generation

6.1 Date of Last Inventory: 01/04/93

6.2 Stored Waste

A. Net stored waste information: \*

	Volume (m3)	Mass (kg)
Net stored non-LDR waste as of 12/31/92	0.0	0.0
<i>Numeric value is present</i>	Yes	Yes
<i>Numeric value</i>	0.00000	0.00000
<i>Units</i>		
Net stored LDR waste as of 12/31/92	UNK	UNK
<i>Numeric value is present</i>	No	No
<i>Numeric value</i>	0.00000	0.00000
<i>Units</i>		

\* Note that rows in italics were added to facilitate processing numeric values.

RF-W012	Combustibles/TRM
---------	------------------

6.2 Stored Waste (continued)

A. Net stored waste information (continued): \*

	Volume (m3)	Mass (kg)
Net stored non-LDR waste as of other date:		
Numeric value is present	No	No
Numeric value	0.00000	0.00000
Units		
Net stored LDR waste as of other date:		
Numeric value is present	No	No
Numeric value	0.00000	0.00000
Units		

B. Gross stored waste information: \*

	Volume (m3)	Mass (kg)
Gross stored non-LDR waste as of 12/31/92	0.0	0.0
Numeric value is present	Yes	Yes
Numeric value	0.00000	0.00000
Units		
Gross stored LDR waste as of 12/31/92	267.91	UNK
Numeric value is present	Yes	No
Numeric value	267.91000	0.00000
Units		
Gross stored non-LDR waste as of other date:		
Numeric value is present	No	No
Numeric value	0.00000	0.00000
Units		

\* Note that rows in italics were added to facilitate processing numeric values.

Information Only

RF-W012	Combustibles/TRM
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**J.2 Stored Waste (continued)**

**B. Gross stored waste information (continued): \***

	Volume (m3)	Mass (kg)
Gross stored LDR waste as of other date:		
Numeric value is present	No	No
Numeric value	0.00000	0.00000
Units		

**C. Basis for determining LDR storage prohibition status:**

Net and gross weight data are not available for all container types.

RFP has assumed this waste to be LDR based on process knowledge characterization, and one sample analyzed for volatiles in 1988. RFP currently manages all of its mixed waste as LDR storage prohibited, independent of its generation date.

1. Variability surrounding fullness of containers precludes a meaningful computation of density.
2. Basis for determining LDR storage prohibition status is based primarily on process knowledge. Analytical data are limited due to the lack of capacity to perform Toxicity Characterization Leaching Procedure (TCLP) on mixed waste at the Rocky Flats Plant.

*\* Note that rows in italics were added to facilitate processing numeric values.*

**D. Total inventory volume for purpose of national summary (m3): 267.910000**

RF-W012	Combustibles/TRM
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**6.3 Projected Waste Generation**

**A. Expected generation termination date:**

**B. Waste projections: \***

	Volume (m3)	Mass (kg)
Projected 1993 generation	24.88	UNK
Numeric value is present	Yes	No
Numeric value	24.88000	0.00000
Numeric modifier (GT/LT/AP)		
Lower limit	0.00000	0.00000
Upper limit	0.00000	0.00000
Units		
Projected 1994 generation	24.88	UNK
Numeric value is present	Yes	No
Numeric value	24.88000	0.00000
Numeric modifier (GT/LT/AP)		
Lower limit	0.00000	0.00000
Upper limit	0.00000	0.00000
Units		
Projected 1995 generation	24.88	UNK
Numeric value is present	Yes	No
Numeric value	24.88000	0.00000
Numeric modifier (GT/LT/AP)		
Lower limit	0.00000	0.00000
Upper limit	0.00000	0.00000
Units		

\* Note that rows in italics were added to facilitate processing numeric values.



RF-W012	Combustibles/TRM
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3.3 Projected Waste Generation (continued) \*

	Volume (m3)	Mass (kg)
Projected 1996 generation	24.88	UNK
Numeric value is present	Yes	No
Numeric value	24.88000	0.00000
Numeric modifier (GT/LT/AP)		
Lower limit	0.00000	0.00000
Upper limit	0.00000	0.00000
Units		
Projected 1997 generation	24.88	UNK
Numeric value is present	Yes	No
Numeric value	24.88000	0.00000
Numeric modifier (GT/LT/AP)		
Lower limit	0.00000	0.00000
Upper limit	0.00000	0.00000
Units		
Projected 1998 through 2002 generation	UNK	UNK
Numeric value is present	No	No
Numeric value	0.00000	0.00000
Numeric modifier (GT/LT/AP)		
Lower limit	0.00000	0.00000
Upper limit	0.00000	0.00000
Units		

\* Note that rows in italics were added to facilitate processing numeric values.

Information Only

RF-W012	Combustibles/TRM
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6.3 Projected Waste Generation (continued) \*

	Volume (m <sup>3</sup> )	Mass (kg)
Projected 2003 through 2022 generation	UNK	UNK
<i>Numeric value is present</i>	No	No
Numeric value	0.00000	0.00000
<i>Numeric modifier (GT/LT/AP)</i>		
Lower limit	0.00000	0.00000
Upper limit	0.00000	0.00000
Units		

7. Waste Packaging

This waste is stored in 55 gallon carbon steel drums with one rigid polyethylene liner and several bag liners and TRUPACT II Containers.

\* Note that rows in italics were added to facilitate processing numeric values.

Information Only

RF-W012	Combustibles/TRM
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7.1 Type of Storage

Type	Material	#	Size	Volume (m3)	Description
55-gallon drum	Carbon steel	1155	55 gallon	.21 m3	DOT 7A Type A
Box	Metal	5	4"	3.17 m3	Rectangular
TRUPACT II	Carbon steel	5		1.9 m3	Standard TRUPACT II

RF-W012	Combustibles/TRM
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**7.2 Readiness of Existing TRU Waste for Shipping and Emplacement in WIPP**

**A. Percentage of existing TRU waste containers meeting the Operations and Safety (O&S) criteria in the WIPP Waste Acceptance Criteria (WAC)..** Revision 4

\_\_ % 55 gallon drums  
\_\_ % boxes  
76 % Other: total

**B. Treatment needed:**

Repackaging to meet decay heat limit; completion of data package.

**C. Percentage of existing waste containers that would be expected to meet the TRUPACT-II TRAMPAC requirements in the WIPP WAC..** Revision 4

\_\_ % 55 gallon drums  
\_\_ % boxes  
76 % Other: total

**D. Waste stream is listed in the WIPP TRUPACT-II Content Code (TRUCON) document: Yes**

**E. TRUCON code: 116**

**F. Head space gas has been sampled from one or more waste containers: UNKNOWN**

RF-W012	Combustibles/TRM
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**8. Waste Stream Management**

**8.1 Current Management**

**A. Current management:**

C. Generated and Stored Only

**B. Treatment or disposal rate for the waste stream expressed in volume per year:**

*\* Units (m<sup>3</sup>/yr):*

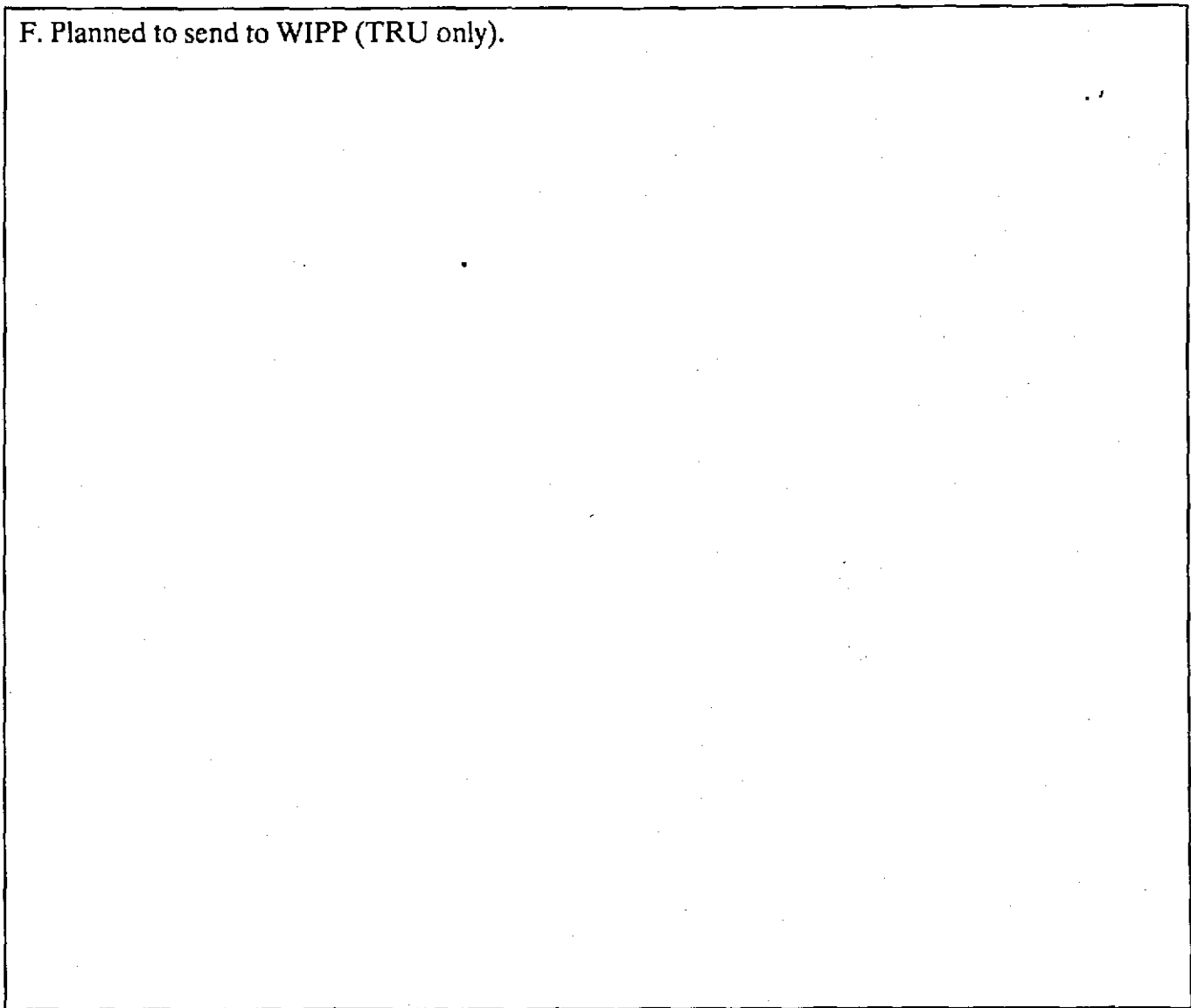
**C. Treatment or disposal rate for the waste stream expressed in mass per year:**

*\* Units (kg/yr):*

**8.2 Planned Management for LDRs**

**A. Future management of waste stream for complying with LDR treatment standards:**

F. Planned to send to WIPP (TRU only).



*\* Note that items in italics were added to facilitate processing numeric values.*

RF-W012	Combustibles/TRM
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### 8.3 Treatment Technology

#### A. Technologies to be applied:

Repackaging to meet WIPP WAC

RF-W012	Combustibles/TRM
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**3.3 Treatment Technology (continued)**

**B. Assigned treatment facility name:**

CTMP Treatment System Path F

**C. Assigned treatment system name:**

CTMP Treatment System Path F

**Assigned treatment system ID:**

**D. Facility agrees to treat:** UNKNOWN

**E. Waste in assigned facility permit:** UNKNOWN

**F. Waste in future facility permit:** UNKNOWN

**G. Other pre-treatment requirements or treatment concerns:**

Treatment of most mixed transuranic waste to meet LDR treatment standards is not applicable because DOE plans to ship these wastes to the Waste Isolation Pilot Plant (WIPP), pending issuance of a No-Migration Determination of the operational phase. Pretreatment to meet the WIPP Waste Acceptance Criteria may be required.

RF-W012	Combustibles/TRM
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**8.4 Technology Status**

**A. Status of the technology to treat this waste:**

C. Technology exists but needs modification

**B. Identified technologies:**

Repackaging to meet WIPP WAC



RF-W012	Combustibles/TRM
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3.4 Technology Status (continued)

C. Need ..

reason and status for modification:

Testing is needed to adapt technology to site specific compositions and radionuclides.

D. Basis for the technology status:

The existing technologies are not directly suitable for use with radioactive mixed wastes and require development work to bridge the gap between non-radioactive and radioactive streams.

RF-W012	Combustibles/TRM
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**8.4 Technology Status (continued)**

**E. Technology development associated with treatment of waste stream:**

Technology exists. Needs modification or verification for application to DOE waste streams.

**F. Relevant TTP..**

**ADS..**

TTP #: RF142001 Subtask 02 ADS #: 3822 TDD # : 3822.F17 (THERMAL) / #3822.F21 (NON-THERMAL)

RF-W012	Combustibles/TRM
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**3.5 Treatment Concerns**

- A. Special or unique treatment or facility concerns that this waste stream presents and that may impact the use of standard treatment methods:**

The radioactive nature of the waste stream requires that the candidate technologies be examined to identify necessary process or equipment modifications dictated by the radioactivity.

**9. Regulatory Concerns**

**9.1 Compliance Agreements**

- A. For waste covered by an EPA or state LDR compliance agreement... and when it was issued:**

FFCA II - May 10, 1991

RF-W012	Combustibles/TRM
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**9.2 Applicable Regulations**

- A. RCRA: Yes
- B. State hazardous waste: Yes
- C. TSCA: No
- D. CERCLA: No

**9.3 Waste meets LDR treatment standard: No**

**A. Basis for determination:**

Process knowledge
-------------------

**9.4 Delisting**

- A. Waste stream has been delisted or is being considered for delisting: No
- B. A petition has been submitted:
- C. Date of submission:
- D. Date of approval:

**9.5 Waste Minimization Activities**

**A. Applicable activities:**

A. Good operating practices B. Technology changes F. Changes in operating status
--

**B. Appropriate waste minimization codes:**

W13
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RF-W012	Combustibles/TRM
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5 Waste Minimization Activities (continued)

C. Description of waste minimization activities:

[Empty box for description of waste minimization activities]

10. Storage Location

A. Current storage location:

Building 776, RCRA Unit 11 & 69  
Building 374, RCRA Unit 19  
Building 664, RCRA Unit 20 and RTR  
Building 569, RCRA Unit 59  
Building 371, RCRA Unit 63  
Building 771, RCRA Unit 665 & 90.75

RF-W012	Combustibles/TRM
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**11. Data Acceptance**

**11.1 Information about this waste stream was omitted because it is classified:** No

**11.2 Date form completed:** 12/21/93

**11.3 Additional Comments:**

**APPENDIX I**

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**APPENDIX I**  
**IDB TOTALS FOR WASTE RADIONUCLIDES DERIVED FROM**  
**TRU WASTE, DECAYED & ACCUMULATED TO DEC 1992**

<u>RADIONUCLIDE</u>	<u>CH</u> <u>CURIES</u>	<u>RH</u> <u>CURIES</u>
Ac-225	2.85E-01	1.30E+00
Ac-227	2.55E-01	4.42E-02
Ac-228	3.79E-01	2.07E-03
Ag109M	1.68E+01	4.56E-08
Ag110	4.98E-06	5.13E-07
Ag110M	3.74E-04	4.20E-05
Am-241	4.13E+04	8.98E+04
Am-242	1.25E-03	0.00E+00
Am-242M	1.26E-03	0.00E+00
Am-243	1.62E+01	3.80E-01
At-217	1.54E+00	4.13E-02
Ba137M	1.88E+03	2.78E+04
Bi-209	0.00E+00	0.00E+00
Bi-210	3.92E-01	3.56E-01
Bi-211	2.98E-01	1.71E-03
Bi-212	2.73E+01	1.31E+00
Bi-213	1.54E+00	4.13E-02
Bi-214	3.13E+00	2.47E+00
Bk-249	3.91E-04	8.26E-04
Bk-250	2.81E-05	0.00E+00
C14	6.05E+00	7.41E+02
Cd109	1.68E+01	0.00E+00
Cd113M	1.61E-05	1.17E-04
Ce144	6.53E+01	8.85E+01
Cf-249	1.14E+00	2.37E-02
Cf-250	5.87E-01	2.12E-01
Cf-251	3.85E-02	0.00E+00
Cf-252	1.09E+02	1.10E+01
Cm-242	1.50E-02	2.87E-06
Cm-243	5.47E-01	3.41E+02
Cm-244	3.94E+04	2.57E+03
Cm-245	1.68E+01	7.63E-06
Cm-246	4.15E-02	1.84E-03
Cm-247	1.13E-09	0.00E+00
Cm-248	2.72E-02	3.70E-04
Co58	6.39E-04	2.40E-06
Co60	1.21E+02	7.41E+03
Cr51	0.00E+00	1.67E-28
Cs134	2.68E+00	3.04E+02
Cs135	2.62E-03	2.46E-02
Cs137	1.98E+03	2.94E+04
Es-253	3.27E-26	0.00E+00
Es-254	2.81E-05	0.00E+00



Eu150	3.71E-05	0.00E+00
Eu152	3.49E+00	9.51E+03
Eu154	1.11E+01	6.50E+03
Eu155	1.60E+01	1.74E+03
Fe55	4.25E-05	1.33E+00
Fe59	4.00E+00	1.34E+00
Fr-221	1.54E+00	4.13E-02
Fr-223	4.10E-03	2.46E-05
H3	1.37E+05	1.16E+01
I129	4.16E-10	0.00E+00
Kr85	2.38E-01	7.23E+00
Mn54	1.48E-02	1.21E+00
Nb95	8.03E+00	3.71E+00
Nb95M	8.07E-02	1.94E-02
Ni63	9.27E-05	3.58E+00
Np-237	1.68E+01	7.66E-01
Np-238	6.29E-06	0.00E+00
Np-239	1.66E+01	1.01E-03
Np-240	1.10E-09	2.64E-14
Np-240M	1.00E-06	2.40E-11
Pa-231	1.87E-03	2.18E-02
Pa-233	1.68E+01	7.63E-01
Pa-234	8.04E-03	2.84E-03
Pa-234M	6.18E+00	2.18E+00
Pb-206	0.00E+00	0.00E+00
Pb-207	0.00E+00	0.00E+00
Pb-208	0.00E+00	0.00E+00
Pb-209	1.54E+00	4.13E-02
Pb-210	3.67E-01	3.81E-01
Pb-211	2.98E-01	1.71E-03
Pb-212	2.73E+01	1.31E+00
Pb-214	3.13E+00	2.47E+00
Pd107	3.88E-04	3.63E-03
Pm147	5.37E+02	1.11E+03
Po-210	3.12E-01	3.30E-01
Po-211	8.15E-04	4.66E-06
Po-212	1.75E+01	8.38E-01
Po-213	1.51E+00	4.04E-02
Po-214	3.13E+00	2.47E+00
Po-215	2.98E-01	1.71E-03
Po-216	2.73E+01	1.31E+00
Po-218	3.13E+00	2.47E+00
Pr144	6.53E+01	8.85E+01
Pu-236	0.00E+00	2.15E-02
Pu-238	5.81E+05	6.17E+04
Pu-239	1.23E+05	4.08E+04
Pu-240	1.63E+04	9.98E+03
Pu-241	3.24E+05	1.78E+05
Pu-242	4.91E+02	9.48E-01
Pu-243	1.13E-09	2.86E-07
Pu-244	1.00E-06	2.40E-11

Ra-223	2.56E-01	4.43E-02
Ra-224	5.50E-01	2.81E+01
Ra-225	2.86E-01	1.30E+00
Ra-226	3.08E+00	2.52E+00
Ra-228	8.03E-02	3.01E-01
Rh106	2.59E+01	6.29E+01
Rn-219	2.98E-01	1.71E-03
Rn-220	2.73E+01	1.31E+00
Rn-222	3.13E+00	2.47E+00
Ru106	2.59E+01	6.29E+01
Sb125	6.61E+00	1.67E+01
Sb126	7.05E-04	6.61E-03
Sb126M	5.04E-03	4.72E-02
Se79	2.28E-03	2.13E-02
Sm151	8.34E+00	7.51E+01
Sn119M	6.25E-03	7.15E-04
Sn121M	1.62E-01	1.41E+00
Sn123M	1.41E-03	2.34E-04
Sn126	5.04E-03	4.72E-02
Sr90	1.44E+03	5.75E+04
Ta182	0.00E+00	1.10E-04
Tc99	1.79E+01	1.22E+00
Te125M	1.68E-02	2.76E-03
Te127	1.02E-01	1.70E-02
Te127M	1.05E-01	1.74E-02
Th-227	2.55E-01	4.43E-02
Th-228	5.64E-01	2.81E+01
Th-229	2.87E-01	1.31E+00
Th-230	7.45E-03	2.08E-02
Th-231	1.05E+00	3.67E+02
Th-232	1.01E-01	3.33E-01
Th-234	6.07E+00	2.30E+00
Tl-207	2.98E-01	1.70E-03
Tl-208	9.82E+00	4.70E-01
Tl-209	3.33E-02	8.93E-04
U-232	3.08E-01	2.80E+01
U-233	2.14E+02	1.04E+03
U-234	5.74E+01	6.94E+00
U-235	9.94E-01	3.67E+02
U-236	2.52E-03	4.46E-03
U-237	1.22E+01	1.19E-01
U-238	6.08E+00	2.30E+00
U-240	1.00E-06	2.40E-11
Y90	1.44E+03	5.75E+04
Zn65	3.41E-08	2.80E-04
Zr93	2.94E-02	2.76E-01
Zr95	3.80E+00	3.34E+01

TOTAL	1.27E+06	5.85E+05
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**ASSUMPTIONS:**

1. Activities reported by individual sites in 1993 IDB are complete and accurate except for values marked as UNK which are counted as 0.
2. Equivalent Pu239 Activities.
3. Calculations to "decay" values reported by DOE sites were performed correctly and assumptions stated in the 1993 IDB are valid.
4. Site reporting was done in accordance with the instructions in the 1993 IDB data call.
5. All values stated in curies in scientific notation.

**METHODOLOGY:**

The figures presented here were arrived at by summing the calculated decayed values in the 1993 IDB from data reported by DOE sites managing TRU waste in response to a formal nationwide data call.

NOTE: The figures here require scaling by an appropriate methodology to arrive at "WIPP Design" values.

15-15

**APPENDIX J**

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After evaluating all information in the MWIR, the waste streams in the NID (for the same TRU waste generating/storage site) were reviewed to identify a similar waste stream. Most of the waste streams in the NID are described in detail in the TRUCON (DOE, 1992). If adequate information was not available in the NID to develop an understanding of the waste stream, further information in TRUCON was reviewed. If a similar waste stream from the same site could be identified in the NID, the waste material parameter data from this NID waste stream were assigned to the particular waste stream profile.

If a similar waste stream from the same site could not be identified in the NID, then waste streams in the NID from other sites were reviewed and a similar waste stream was identified. The waste material parameter data from this NID waste stream were assigned to the waste stream profile.

There were four conditions that required the site IDC to be modified for the purposes of the WTWBIR.

1. The waste stream description indicated that the waste was expected to be WIPP WAC certifiable, but there was no corresponding IDC in the NID for that waste stream.
2. The waste stream description indicated that the waste was a liquid waste. Liquid waste streams do not meet disposal criteria for WIPP. It was assumed that these waste streams will be solidified prior to emplacement in the WIPP. The waste stream was assigned an IDC and waste material parameter data that corresponds to the solidified final waste form. When solidification occurs, there will be a volume increase. This volume increase was assumed to be 5:1.
3. The waste stream description indicated that the waste was a particulate waste stream. Particulate waste streams do not meet disposal criteria for WIPP. It was assumed that these waste streams will be solidified prior to emplacement in the WIPP. The waste stream was assigned an IDC and waste material parameter data that corresponds to the solidified final waste form. When solidification occurs, there will be a volume increase. This volume increase was assumed to be 4:1.
4. The TRU waste generating/storage site listed the waste stream as "unknown," but the waste stream description provided enough information to reclassify the waste.

## APPENDIX J METHODOLOGY FOR CHANGING TRU WASTE GENERATOR/STORAGE SITE IDCs

In order to develop a waste characterization package for each waste stream at each DOE TRU waste generator/storage site, it was necessary to correlate the information in the MWIR, the NID, and the IDB. Because these databases were generated at different times to meet different requirements, the nomenclature, waste descriptions, waste codes, waste groupings, and waste streams can be different in each database.

### Changing TRU Waste Generator/Storage Site IDCs

An important step in developing the correlation between the three databases was to relate the waste streams in the MWIR with those in the NID. If the MWIR waste stream did not have a direct correlation with a NID waste stream (IDCs did not match), then the information in the MWIR was closely examined to determine the physical and chemical properties of the waste stream.

There are several sections in the MWIR that provide information on waste stream characterization. The first sections evaluated were the "Waste Stream Description" and the "Waste Matrix Code." The "Waste Stream Description" section generally provided a physical and chemical description of the stream. The detail of information provided varied by site and by waste stream. At times it provided information about the generating process and required treatment to meet WIPP WAC. The "Waste Matrix Code" section provided a general overview of the physical and chemical waste form. The WMCs were especially helpful in determining the physical state of the waste when the waste stream description did not define the waste as solid, particulate, liquid, or sludge. Additionally, if the waste stream description provided a variety of types of waste (e.g., sludge, combustibles, etc.) the WMC was helpful in determining the composition of the majority of the waste stream. A list of specific waste matrix constituents was provided for each waste stream. These were usually similar for each stream. At times, several dissimilar codes were provided for one stream. An overall composite matrix code was provided for these streams, which was assumed to be the characterization of the majority of the waste stream (as defined in Appendix C of the WTWBIR).

If the MWIR data were not adequate to describe the waste stream, other sections of the MWIR were evaluated. The "Generating Site" section was used primarily to determine the generating site of waste streams stored at the INEL. The "Waste Names/WS ID" section provided a brief description of the waste stream. This was especially helpful in characterizing IN waste streams. This section provided "Waste Stream IDs" and "Previous Waste Stream IDs." These IN identification numbers could be related to the identification numbers of the generating sites, thus making it possible to go to the waste descriptions of the generating sites.

The "Cation/Anion" section provided information regarding previous treatment of the waste. This was helpful in determining if the waste has been compacted or solidified. The "Other Characterization" section was used in determining if a waste stream was organic or inorganic. The "Waste Packaging" section provided some information on the physical state of the waste, especially for liquid waste streams. The "MTRU Readiness" section was helpful in determining if the waste stream required treatment prior to meeting the WIPP WAC. Liquid, particulate, and reactive waste streams were identified as requiring treatment. The "Treat./Tech.," "Treatment Concerns," and "Regulatory Concerns" sections provided additional details on the treatment requirements of the waste stream and descriptions of the final waste form.

**APPENDIX K**

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Information Only

51



**APPENDIX K  
WASTE STREAM IDENTIFICATION CROSS-CORRELATION TABLE**

<u>WS UNIQUID</u>	<u>MWIR IDC<sup>1</sup></u>	<u>TRUCON<sup>2,3</sup></u>	<u>NMVP<sup>2,3</sup></u>	<u>PART B<sup>2</sup></u>
AE-W038	NR	II	II	II
AE-W039	NR	II	II	II
AE-W040	NR	II	II	II
AE-W041	NR	II	II	II
AE-W042	NR	II	II	II
AL-W005	Glovebox	II	II	II
AW-W016	245T	II	II	II
AW-W018	180T	II	II	II
AW-W019	182T	II	II	II
AW-W020	241T	II	II	II
AW-W021	243T	II	II	II
AW-W022	246T	II	II	II
AW-W024	503	II	II	II
ET-W002	ET	II	II	II
IN-W112	172	II	II	Filters (Unspecified)
IN-W139	NR	II	II	Metal (Unspecified)
IN-W146	NR	II	II	II
IN-W157	004	ID213	ID213	Solidified Liquid
IN-W159	811	II	II	II
IN-W161	371	ID222	ID122	Firebrick and Ceramic Crucibles
IN-W163	375	ID122	ID122	Firebrick and Ceramic Crucibles
IN-W164	700	ID112	ID112	Organic Liquid/Sludge

<sup>1</sup> NR = Not Reported

<sup>2</sup> II = Insufficient Information was provided by the site to determine the code.

<sup>3</sup> TRUCON and NMVP Codes cannot be assigned unless the site provides a corresponding waste IDC or TRUCON number in MWIR.

<sup>4</sup> IDC not in TRUCON. TRUCON and NMVP codes are based the TRUCON assignments made in MWIR by the storage/generating site.

52



IN-W166	114	ID114 <sup>3</sup>	ID114 <sup>3</sup>	Inorganic Process Solids and Soil
IN-W167	112	ID112 <sup>3</sup>	ID112 <sup>3</sup>	Organic Liquid/Sludge (Unspecified)
IN-W169	330	ID216	ID216	Combustibles
IN-W170	120	II	II	Combustibles (Unspecified)
IN-W171	110	II	II	Combustibles (Unspecified)
IN-W172	010	II	II	Combustibles (Unspecified)
IN-W174	834	II	II	II
IN-W177	835	II	II	II
IN-W179	836	II	II	II
IN-W181	978	ID211	ID211	Inorganic Waste Water Treatment Sludge
IN-W186	116	ID116 <sup>3</sup>	ID116 <sup>3</sup>	Combustibles (Unspecified)
IN-W187	980	II	II	II
IN-W188	976	ID211	ID211	Inorganic Waste Water Treatment Sludge
IN-W189	464	ID221	ID221	Benelex and Plexiglas
IN-W197	336	ID216	ID216	Combustibles
IN-W198	337	ID216	ID216	Combustibles
IN-W199	460	II	ID NYD	Combustibles (Unspecified)
IN-W202	970	ID216	ID216	Combustibles
IN-W203	826	II	II	Combustibles (Unspecified)
IN-W204	827	II	II	Combustibles (Unspecified)
IN-W205	900	ID216	ID216	Combustibles
IN-W206	119	ID119 <sup>3</sup>	ID119 <sup>3</sup>	Filters (Unspecified)
IN-W207	328	II	II	Filters (Unspecified)
IN-W208	335	ID219	ID219	Filters
IN-W209	338	ID219	ID219	Filters
IN-W210	360	II	ID NYD	Filters (Unspecified)
IN-W211	376	ID119	ID119	Filters
IN-W212	490	ID219	ID219	Filters

<sup>1</sup> NR = Not Reported

<sup>2</sup> II = Insufficient Information was provided by the site to determine the code.

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<sup>4</sup> IDC not in TRUCON. TRUCON and NMVP codes are based the TRUCON assignments made in MWIR by the storage/generating site.

<u>WS UNIQUID</u>	<u>MWIR IDC<sup>1</sup></u>	<u>TRUCON<sup>2,3</sup></u>	<u>NMVP<sup>2,3</sup></u>	<u>PART B<sup>2</sup></u>
IN-W213	805	II	II	Filters (Unspecified)
IN-W214	813	II	II	II
IN-W216	001	ID211	ID211	Inorganic Waste Water Treatment Sludge
IN-W218	007	ID211	ID211	Inorganic Waste Water Treatment Sludge
IN-W219	030	II	II	II
IN-W220	111	ID111 <sup>3</sup>	ID111 <sup>3</sup>	Inorganic Waste Water Treatment Sludge (Unspecified)
IN-W221	113	ID113 <sup>3</sup>	ID113 <sup>3</sup>	Solidified Liquid (Unspecified)
IN-W222	292	II	II	II
IN-W225	302	ID221	ID221	Benelex and Plexiglas
IN-W228	002	ID211	ID211	Inorganic Waste Water Treatment Sludge
IN-W230	122	ID122 <sup>3</sup>	ID122 <sup>3</sup>	Firebrick and Ceramic Crucibles <sup>4</sup>
IN-W240	118	ID118 <sup>3</sup>	ID118 <sup>3</sup>	Glass (Unspecified)
IN-W243	440	ID218	ID218	Glass
IN-W245	441	ID225	ID225	Glass (Oil Residue)
IN-W247	442	ID218	ID218	Glass
IN-W249	810	II	II	Glass (Unspecified)
IN-W250	123	ID123 <sup>3</sup>	ID123 <sup>3</sup>	Leaded Rubber (Unspecified)
IN-W252	339	ID223	ID223	Leaded Rubber
IN-W254	463	ID223	ID223	Leaded Rubber
IN-W256	802	II	ID NYD	Leaded Rubber (Unspecified)
IN-W257	151	II	II	II
IN-W259	104	II	II	II
IN-W260	040	II	ID NYD	II
IN-W263	842	II	II	II
IN-W265	374	ID121	ID121	Benelex and Plexiglas
IN-W267	372	II	II	II

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<sup>4</sup> IDC not in TRUCON. TRUCON and NMVP codes are based the TRUCON assignments made in MWIR by the storage/generating site.

582

<u>WS UNIQUID</u>	<u>MWIR IDC<sup>1</sup></u>	<u>TRUCON<sup>2,3</sup></u>	<u>NMVP<sup>2,3</sup></u>	<u>PART B<sup>2</sup></u>
IN-W269	150	II	II	II
IN-W271	814	II	II	II
IN-W272	312	ID115	ID115	Graphite
IN-W275	301	II	II	Graphite (Unspecified)
IN-W276	300	ID215	ID215	Graphite
IN-W278	950	II	II	II
IN-W280	803	II	II	Metal (Unspecified)
IN-W281	824	II	II	II
IN-W283	241	ID225	ID225	Glass (Unspecified)
IN-W285	201	II	ID NYD	II
IN-W287	101	II	ID NYD	II
IN-W289	121	II	II	II
IN-W291	100	II	II	II
IN-W294	481	ID217	ID217	Metal
IN-W296	480	ID217	ID217	Metal
IN-W298	320	ID217	ID217	Metal
IN-W300	117	ID117 <sup>3</sup>	ID117 <sup>3</sup>	Metal (Unspecified)
IN-W302	020	II	II	Metal (Unspecified)
IN-W306	9999	II	II	II
IN-W308	000	II	II	II
IN-W309	003	ID212	ID212	Organic Liquid/Sludge
IN-W311	409	II	II	Pyrochemical Salt (Unspecified)
IN-W312	124	II	II	Pyrochemical Salt (Unspecified)
IN-W314	414	II	II	Pyrochemical Salt (Unspecified)
IN-W315	005	II	II	Pyrochemical Salt (Unspecified)
IN-W317	432	II	II	II
IN-W319	431	II	II	II
IN-W321	430	II	II	II
IN-W323	153	II	II	II

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<sup>4</sup> IDC not in TRUCON. TRUCON and NMVP codes are based the TRUCON assignments made in MWIR by the storage/generating site.

<u>WS UNIQID</u>	<u>MWIR IDC<sup>1</sup></u>	<u>TRUCON<sup>2,3</sup></u>	<u>NMVP<sup>2,3</sup></u>	<u>PART B<sup>2</sup></u>
IN-W325	815	II	II	II
IN-W327	847	II	II	II
IN-W329	848	II	II	II
IN-W330	801	II	II	II
IN-W332	204	II	II	II
IN-W334	203	II	II	II
IN-W336	202	II	II	Combustibles (Unspecified)
IN-W337	200	II	II	II
IN-W338	163	II	II	II
IN-W339	162	II	II	II
IN-W341	160	II	II	II
IN-W342	157	II	II	II
IN-W345	155	II	II	II
IN-W347	102	II	II	II
IN-W349	107	II	II	II
IN-W350	106	II	II	II
IN-W351	105	II	II	II
IN-W354	412	ID224	ID224	Not Applicable
IN-W355	411	ID124	ID124	Not Applicable
IN-W356	410	ID224	ID224	Not Applicable
IN-W357	425	II	II	Not Applicable
IN-W359	015	II	II	Not Applicable
IN-W360	012	II	II	Not Applicable
IN-W361	422	II	II	Not Applicable
IN-W362	421	II	II	Not Applicable
IN-W363	420	II	II	Not Applicable
IN-W364	392	II	II	Not Applicable
IN-W365	391	II	II	Not Applicable
IN-W366	370	ID222	ID222	Not Applicable

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<sup>4</sup> IDC not in TRUCON. TRUCON and NMVP codes are based the TRUCON assignments made in MWIR by the storage/generating site.

<u>WS UNIQUID</u>	<u>MWIR IDC<sup>1</sup></u>	<u>TRUCON<sup>2,3</sup></u>	<u>NMVP<sup>2,3</sup></u>	<u>PART B<sup>2</sup></u>
IN-W367	311	II	II	Not Applicable
IN-W368	310	II	II	Not Applicable
IN-W369	303	II	II	Not Applicable
IN-W370	115	II	II	Not Applicable
IN-W371	416	ID117	ID117	Not Applicable
IN-W372	081	II	II	Not Applicable
IN-W373	361	II	II	Not Applicable
IN-W374	960	II	ID NYD	Not Applicable
KA-W016	OR-125A	II	II	II
LA-W034	NR	II	II	II
LA-W035	NR	II	II	II
LA-W036	NR	II	II	II
LA-W037	NR	II	II	II
LA-W038	NR	II	II	II
LA-W039	NR	II	II	II
LA-W040	NR	II	II	II
LA-W041	NR	II	II	II
LA-W042	NR	II	II	II
LA-W043	NR	II	II	II
LA-W044	NR	II	II	II
LA-W045	NR	II	II	II
LL-W018	NR	II	II	II
LL-W019	NR	II	II	II
LL-W020	NR	II	II	II
MD-W002	MD-833	II	II	II

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<sup>2</sup> II = Insufficient Information was provided by the site to determine the code.

<sup>3</sup> TRUCON and NMVP Codes cannot be assigned unless the site provides a corresponding waste IDC or TRUCON number in MWIR.

<sup>4</sup> IDC not in TRUCON. TRUCON and NMVP codes are based the TRUCON assignments made in MWIR by the storage/generating site.

<u>WS UNIQUID</u>	<u>MWIR IDC<sup>1</sup></u>	<u>TRUCON<sup>2,3</sup></u>	<u>NMVP<sup>2,3</sup></u>	<u>PART B<sup>2</sup></u>
MD-W003	MD-835	II	II	II
MU-W002	OR-125A	II	II	II
NT-W001	LL-002	NT111 NT211	NT111 NT211	NR
OR-W040	2039	OR125 <sup>3</sup>	OR125 <sup>3</sup>	NR
OR-W042	2041	II	II	II
OR-W044	2043	OR125 <sup>3</sup>	OR125 <sup>3</sup>	II
OR-W045	2044	OR125 <sup>3</sup>	OR125 <sup>3</sup>	II
OR-W046	2045	II	II	II
OR-W047	2046	OR125 <sup>3</sup>	OR125 <sup>3</sup>	II
PA-W014	14	II	II	II
PA-W015	15	II	II	II
RF-W008	RF-374	RF121	RF121	Benelex and Plexiglas
RF-W010	RF-800	RF111	RF111	Inorganic Waste Water Treatment Sludge
RF-W011	RF-480	RF117	RF117	Metal
RF-W012	RF-831	RF116	RF116	Combustibles
RF-W013	RF-801	RF112	RF112	Organic Liquid/Sludge
RF-W026	RF-375	RF122	RF122	Firebrick and Ceramic Crucibles
RF-W028	RF-321	RF117	RF117	Metal
RF-W029	RF-339	RF123	RF123	Leaded Rubber
RF-W032	RF-444	RF118	RF118	Glass
RF-W036	RF-377	RF122	RF122	Firebrick and Ceramic Crucibles

<sup>1</sup> NR = Not Reported

<sup>2</sup> II = Insufficient Information was provided by the site to determine the code.

<sup>3</sup> TRUCON and NMVP Codes cannot be assigned unless the site provides a corresponding waste IDC or TRUCON number in MWIR.

<sup>4</sup> IDC not in TRUCON. TRUCON and NMVP codes are based the TRUCON assignments made in MWIR by the storage/generating site.

488

<u>WS UNIQUID</u>	<u>MWIR IDC<sup>1</sup></u>	<u>TRUCON<sup>2,3</sup></u>	<u>NMVP<sup>2,3</sup></u>	<u>PART B<sup>2</sup></u>
RF-W037	RF-320	RF117	RF117	Metal
RF-W038	RF-802	RF113	RF113	Solidified Liquid
RF-W040	NR	II	II	II
RF-W041	RF-341	II	II	Leaded Rubber (Unspecified)
RF-W052	RF-440	RF118	RF118	Glass
RF-W056	RF-370	RF118	RF118	Glass
RF-W057	RF-438	RF122	RF122	Firebrick and Ceramic Crucibles
RF-W058	RF-411	RF124	RF124	Pyrochemical Salt
RF-W059	NR	II	II	II
RF-W060	RF-303	RF115	RF115	Graphite
RF-W063	NR	II	II	II
RF-W065	RF-333	II	II	II
RF-W066	RF-490	RF119	RF119	Filters
RF-W067	RF-376	RF119	RF119	Filters
RF-W068	NR	II	II	II
RF-W069	NR	II	II	II
RF-W076	NR	II	II	II
RL-W071	TRUM-01	II	II	II MWIR IDCs cannot be related to TRUCON or NMVP IDCs
RL-W072	TRUM-02	II	II	II
RL-W074	TRUM-04	II	II	II
RL-W075	TRUM-05	II	II	II
RL-W077	TRUM-07	II	II	II
RL-W078	TRUM-08	II	II	II
RL-W079	TRUM-09	II	II	II
RL-W080	TRUM-10	II	II	II
RL-W081	TRUM-11	II	II	II
RL-W082	TRUM-12	II	II	II

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567

<u>WS UNIQUID</u>	<u>MWIR IDC<sup>1</sup></u>	<u>TRUCON<sup>2,3</sup></u>	<u>NMVP<sup>2,3</sup></u>	<u>PART B<sup>2</sup></u>
RL-W083	TRUM-13			
RL-W085	TRUM-15			
RL-W086	TRUM-16			
RL-W101	TRUM-17			
RL-W133	TRUM-21			
RL-W134	TRUM-22			
RL-W135	RH-001			
SA-W134	NR			
SR-W026	O49/050			MWIR IDCs cannot be related to TRUCON or NMVP IDCs
SR-W027	049/050			
SR-W044	096			
SR-W053	NR			
WV-W024	2404			
WV-W041	NR			

<sup>1</sup> NR = Not Reported

<sup>2</sup> || = Insufficient Information was provided by the site to determine the code.

<sup>3</sup> TRUCON and NMVP Codes cannot be assigned unless the site provides a corresponding waste IDC or TRUCON number in MWIR.

<sup>4</sup> IDC not in TRUCON. TRUCON and NMVP codes are based the TRUCON assignments made in MWIR by the storage/generating site.

508



**APPENDIX L**

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**Information Only**

## APPENDIX L WTWBIR DATABASE DESCRIPTION

A database was set up to support the WTWBIR. This database is referred to as the WTWBIR database and is used to roll up the waste data in the WTWBIR. The database is operated in the Microsoft Access Version 2.0 system.

The primary sources for the data used in the WTWBIR database are the Phase II MWIR and the NID. Both of these sources are described or defined in Section 1.3.4 of the WTWBIR. The data dictionary for the WTWBIR is listed in Table L-2 of this appendix. The table is organized in groups based on the source of the data.

### L.1 MIXED WASTE INVENTORY REPORT DATA

Each record in the database represents one waste stream as defined by a unique waste stream (UNIQUE\_WS) that directly corresponds to the same field in the MWIR database. Only the mixed TRU waste records were imported. The data from some MWIR fields were not imported directly, but were used to produce new fields in the WTWBIR database. The MWIR-projected volume fields were added to produce one field in the WTWBIR database for a total projected volume. The total stored volume (TOTVOL) was imported directly from the similarly named field in the MWIR. The PCB-related fields in the MWIR were used to define a negative or positive entry for a new field, called PCBQ, which was used to determine whether a stream was regulated for PCBs. This field is similar to the ASBESTOSQ field imported from the MWIR used to determine whether a stream was regulated for asbestos. The data in other fields were imported directly without change.

The reports and tables produced for the WTWBIR are produced from different data sorts based on the MWIR fields and some modified MWIR fields added based on expert judgment. The data are sorted into waste stream profiles based on WMCs, WMCGs by site, CH or RH requirements, and the total WIPP inventory. Waste streams are defined by the unique waste stream identification number in the field UNIQUE\_WS. The sites are defined in the field WS\_SITE. The WMC was assigned to each stream in the MWIR in the field WS\_MATCODE. This parameter is described in the MWIR form instructions as a "treatability group" and definitions are provided for each treatability group number based on waste forms and potential treatment options (see WTWBIR Appendix C). The WS\_MATCODE represents a general description of the waste form and contents. The field ASSIGN\_MTCD10 was added by the WTWBIR team to identify the WMC used for sorting data for the tables and reports in the WTWBIR.

The field MATRIX\_NAME was also added to describe groups of WMCs. In the WTWBIR the WMCs are sorted into a final set of 11 WMCGs. These WMCGs are based on similar physical and chemical properties. The names for the final WMCGs and the associated WMCs are shown in Table 1-2 in Chapter 1 of the WTWBIR. The names from Table 1-2 appear in the MATRIX\_NAME field for each waste stream record. This field was used to sort for those tables and reports based on the 11 WMCGs assigned by the WTWBIR team.

A field called SCALED\_VOL has been added for the total volume of each waste stream that will be disposed in the WIPP. This is a calculated field used only for the CH-TRU waste streams and is the amount of waste necessary to fill WIPP to its capacity. Additional waste volume was calculated for each waste stream proportionate to the sum of stored and projected volumes for each stream such that the sum of the scaled volumes for CH-TRU

waste equaled 180,000 m<sup>3</sup>. Enough waste is already identified to fill the WIPP to the regulatory capacity for RH-TRU waste.

Additional waste stream records were added to the database for non-mixed TRU waste at each site. The Phase II MWIR report includes only the mixed waste streams at each TRU waste generator/storage site. The INEL non-mixed TRU waste streams were included in the Phase I MWIR report but not in the Phase II report. Therefore, for INEL, the non-mixed TRU waste streams are imported from the Phase I MWIR. For other sites, non-mixed TRU waste streams were estimated based on expert judgement and the IDB for 1993. The IDB includes total volumes for all TRU waste for each waste storage/generator site. The amount of non-mixed TRU waste was estimated by subtracting the volumes for each site (except INEL) reported in the MWIR from the total TRU waste volumes reported in the IDB. These volumes for each site were then assigned to several different waste streams related to specific WMCs. The WMCs, volumes, IDCs, etc. were assigned based on expert judgement, previous site data, and informal contacts with knowledgeable site personnel. These waste streams can be identified by the UNIQUE\_WS number. For mixed TRU waste streams from the MWIR, the number is of the form RF-W110 whereas for WTWBIR added streams the number is of the form RF-T110. This numbering system does not apply to the INEL non-mixed TRU waste streams because the numbering used in the phase I MWIR was retained.

## L.2 NONRADIONUCLIDE INVENTORY DATABASE

The NID information was not imported directly, but was processed to produce the parameter information required for each record. The fields derived from the NID are identified in Table L-1 of this report. The NID information was rolled up into the parameters as identified by these fields. For example, weights of metals such as brass, copper, tantalum, and materials simply described as "metals" were rolled up under the field INOTMxxx (where xxx is minimum, maximum, or average) which stands for "inorganic other metals." Note that because some materials are described only as metals, aluminum and iron can be in the INOTMxxx field as well as in the INFExxx or INALxxx fields.

It is assumed for the purposes of this version of the WTWBIR (Revision 0) that all CH-TRU waste is packaged in standard 55-gallon steel drums with plastic liners and RH-TRU waste is packaged in the RH shipping containers. Because this is the case for every container and stream, it also is assumed unnecessary for this data to be explicitly entered in the database. The amount of steel in the drums is reported separately in the waste stream profiles.

Two categories of sludges and solidified materials are represented by fields. These are solidified inorganic solids (SINxxx) and solidified organic solids (SORxxx). The particular category into which a sludge or solidified material is placed is determined by the overall matrix of the resulting material after any solidification or stabilization efforts. For example, a small amount of organic liquids/sludges solidified in cement would be placed in the "inorganic solids" category and a drum of organic-based resin beads would be placed in the "organic solids" category.

The rest of the fields are reasonably self explanatory, but additional discussion on ORGCxxx, ORGRxxx, and ORGPxxx, may be helpful. The field ORGCxxx includes all cellulose-based materials and will typically include paper, cloth, wood, kimwipes and other materials derived from plant based materials. It is assumed that cloth is plant-derived material such as cotton and not plastic-based material such as rayon or nylon. The data does not describe the type of cloth. ORGRxxx consists of rubber-based materials. Included in this category are hypalon,

neoprene, and surgeons gloves. ORGPxxx represents plastics such as Lucite, polyethylene, Tyvek, Teflon and polyvinyl chloride. Plastic bags are used extensively in packaging the waste and would be included in this category. The plastic drum liners are not included in this category and are listed separately.

Each record derived from the NID is associated with an IDC number by the site as an identification code for a particular waste stream or type of waste. Expert judgement was used to assign an appropriate IDC to each MWIR waste stream (see Appendix J of the WTWBIR). The IDC then represented the relationship between an MWIR waste stream and the NID-derived material parameter data. The NID information provided weights for materials in an average drum and sometimes provided minimum and maximum weights for the materials. These data were used to calculate densities of particular materials for each IDC. These weights for each material parameter represent the waste profile for each IDC and, hence, for each MWIR waste stream.

Waste material parameters from the NID were rolled up into more general categories. The best way to describe this is with a **hypothetical example** in Table L-1.

**TABLE L-1. NID INFORMATION**

Waste Material Parameter	Minimum (wt%)	Average (wt%)	Maximum (wt%)
Paper	10	30	80
Kimwipes	5	15	40
Cloth	0	5	10
Cellulosics			
Drum Weights (kg) (waste only)	50	95	150

The average weight percent does not add to 100 percent because other parameters, such as metals, make up the rest of an average drum. As shown in the fourth line of Table L-1, the data would roll up into the WTWBIR database as cellulosic materials. The result in the WTWBIR would be as follows:

Weight per drum (Kg)

Parameter	Min	Avg	Max
Cellulose	7.5	47.5	150

The minimum is the sum of the minimum weight percents in the NID, multiplied by the minimum weight of waste (i.e., 15 percent x 50 kg = 7.5 kg) in the drum. The average is the sum of the average weight percents multiplied by the average weight of waste (i.e., 50 percent x 95 kg = 42.5 kg) in the drum. The maximum is the sum of the maximum weight percentages multiplied by the maximum weight of waste (i.e., 100 percent x 150 kg = 150 kg) in the drum. In this case the maximum weight percentages add to more than 100 percent, which is physically impossible; therefore, 100 percent is used for the maximum weight percentage. When tables and reports are computed for the WTWBIR, the weights per drum are converted to weight per cubic meter based on 0.208 cubic meters per 55-gallon drum.

The rollups of these material parameters by WMCGs or by site use the volumes from the MWIR information in the WTWBIR database. The rollups by WMCGs or by site require combining data for several MWIR waste streams. The averages for the material parameters are calculated from the NID-derived average densities modified by the MWIR volume fractions and summed as follows:

$$\text{Average Density of rollup group} = \text{Average Density}_i \times \frac{(\text{Volume MWIR Stream}_i)}{(\text{Total Volume of Group})} + \bullet \bullet \bullet$$

The minimum density is chosen as the smallest minimum density of a particular waste material parameter in the MWIR waste streams in a particular site-specific rollup. The maximum density is chosen in a similar manner, except that the largest maximum density was chosen.

In many cases, the NID does not have data for minimum and maximum percentages, even though average percentages are provided. In these cases, for rollup purposes only, the minimum is assumed to be zero and the maximum is assumed to be equal to the average. This ensures that the calculated and rolled up maximum densities are greater than the average densities. However, the maximum density may not be a true maximum but the maximum average density.

### L.3 TABLES AND REPORTS FOR THE WTWBIR

The tables and reports for the WTWBIR were produced using the facilities provided by the Microsoft Access Version 2.0 database system. These tables and reports consist primarily of various sorts based on waste streams, WMCs, sites, etc. and summations of volumes and material parameter weights. Queries and report specifications were set up as defined within the Access system and quality controlled in compliance with the Quality Assurance Plan CTS\_WTAC\_0001.

### L.4 WTWBIR TEAM

The data entry, manipulations, and reporting was conducted in conformance to a Quality Assurance Plan (CTS-WTAC-0001). The basic concept of the plan was to:

- Maintain record copies of the database at different points in the development.
- Maintain a paper trail of additions and changes to the database.
- Document and verify the correct use of the database to produce the reports and tables used in the WTWBIR.

This was accomplished by documenting and verifying the changes, additions, corrections, and report and table generation through the use of formal change forms signed and dated by the implementor and checker. The implementor is the individual who initially makes the changes or develops the report or table and the checker is a another individual who checks and verifies that the initial work was correct. If the initial implementation was not correct, the checker confers with the implementor, changes are agreed upon, and the checker and implementor both check that the changes are properly implemented.

The change form is also used by anyone on the WTWBIR team to request a change or addition to the database. In this case, the form also includes the requestors name and the date requested. The requestor can also be the checker or implementor but not both.

The database manager is responsible for maintaining the record copies of the database, tracking and ensuring proper use of change forms and ensuring that the technical lead for the WTWBIR team is cognizant of changes being made to the data.

## **L.5 NONRADIONUCLIDE DATABASE**

The data in the NID was provided by IT. A quality control check of the data was conducted by IT using internal quality assurance plans. The WTWBIR team's quality assurance plan accepted the data as received from IT and ensured that the data was correctly manipulated and imported into the WTWBIR database.

## **L.6 MIXED WASTE INVENTORY REPORT**

This is a published database used extensively to develop the WTWBIR database. The WTWBIR quality assurance plan accepted the data as published and ensured that the data was correctly manipulated and imported into the WTWBIR database.

**TABLE L-2. WTWBIR DATA DICTIONARY**

UNIQUE_WS	Waste stream identification number from Phase II MWIR
WASTESTREA	Short for "Waste Stream Description": descriptive information attached to the waste stream record by the interim storage site. From Phase II MWIR
WASTETYPE	For the purposes of the WTWBIR, a binary choice between mixed TRU waste and TRU waste.
WS_ID_IMWR	Waste stream identification in the Interim Mixed Waste Inventory Report, if applicable and reported
WS_ID_SITE	Waste stream identification assigned locally at the interim storage site
Field_Office	Abbreviation of DOE field office responsible for interim storage site
Generator	Abbreviation of the site where the waste was generated
ID Code	Site-specific IDCs assigned to the specified stream by the interim storage site
IDC1	IDC, first reported by site, if applicable
WS-SITE	Interim storage site abbreviation
WS_TRUCON	First TRUCON assigned by site, if applicable
WS_TRUCON1	Second TRUCON assigned by site, if applicable
WS_MATCODE	Waste stream treatability group number assigned by the site for the Phase II MWIR
WS_MATNAME	Name associated with the treatability group number assigned by the site for the Phase II MWIR
Assign_MTCD10	Treatability group number assigned by WTWBIR team on the basis of professional judgement and review of reported and available data
MATRIX_NAME	The name assigned by the WTWBIR team to group waste streams by common waste parameters. Used to roll up waste streams for the WTWBIR (See Table 1-2)
ASBESTOSQ	Binary response as to whether or not the waste stream is regulated for asbestos (YES or NO)

**TABLE L-2. WTWBIR DATA DICTIONARY**

PCBQ	Binary response as to whether or not the waste stream is regulated for PCBs
Cunit	Units of volume used to specify CVolume, normally g for gallons
CVolume	Internal volume of the container specified. Normally 55-gal. drums for Rev. 0
Stored_Volume	Total volume in m <sup>3</sup> stored at the specified site at end of 1992; extracted from the Phase II MWIR, including WTWBIR adjustments
PROJ_SUM	Projected additional amount generated in the future that will go to the WIPP; extracted from the Phase II MWIR, including WTWBIR adjustments
Scaled	The additional volume needed to fill the WIPP with CH-TRU waste to 180,000m <sup>3</sup>
INALavg	Aluminum-based materials, density in kg/m <sup>3</sup> for a specific waste stream
INALmax	Aluminum-based materials, maximum reported density in kg/m <sup>3</sup> for a specific waste stream
INALmin	Aluminum-based materials, minimum reported density in kg/m <sup>3</sup> for a specific waste stream
INFEavg	Iron-based materials, volume-weighted average, for a specific waste stream
INFEmax	Iron-based materials, maximum reported, for a specific waste stream
INFEmin	Iron-based materials, minimum reported, for a specific waste stream
INOTMavg	Other inorganic metals, volume-weighted average, for a specific waste stream
INOTMmax	Other inorganic metals, maximum reported, for a specific waste stream
INOTMmin	Other inorganic metals, minimum reported, for a specific waste stream
INOTOavg	Other inorganic materials, other materials, volume-weighted average, for a specific waste stream
INOTOmax	Other inorganic materials, other materials, maximum reported, for a specific waste stream
INOTOmin	Other inorganic materials, other materials, minimum reported, for a specific waste stream



TABLE L-2. WTWBIR DATA DICTIONARY

ORGCavg	Organic materials, cellulose, volume-weighted average, for a specific waste stream
ORGCmax	Organic materials, cellulose, maximum reported, for a specific waste stream
ORGCmin	Organic materials, cellulose, minimum reported, for a specific waste stream
ORGOTavg	Organic materials, other, volume-weighted average, for a specific waste stream
ORGOTmax	Organic materials, other, maximum reported, for a specific waste stream
ORGOTmin	Organic materials, other, minimum reported, for a specific waste stream
ORGPavg	Organic materials, plastic, volume-weighted average, for a specific waste stream
ORGPmax	Organic materials, plastic, maximum reported, for a specific waste stream
ORGPmin	Organic materials, plastic, minimum reported, for a specific waste stream
ORGRavg	Organic materials, rubber, volume-weighted average, for a specific waste stream
ORGRmax	Organic materials, rubber, maximum reported, for a specific waste stream
ORGRmin	Organic materials, rubber, minimum reported, for a specific waste stream
SINavg	Solidified materials, inorganic matrix, volume-weighted average, for a specific waste stream
SINmax	Solidified materials, inorganic matrix, maximum reported, for a specific waste stream
SINmin	Solidified materials, inorganic matrix, minimum reported, for a specific waste stream
SLavg	Soils, volume-weighted average, for a specific waste stream
SLmax	Soils, maximum reported, for a specific waste stream
SLmin	Soils, minimum reported, for a specific waste stream
SORavg	Solidified materials, organic matrix, volume-weighted average, for a specific waste stream

**TABLE L-2. WTWBIR DATA DICTIONARY**

SORmax	Solidified materials, organic matrix, maximum reported, for a specific waste stream
SORmin	Solidified materials, organic matrix, minimum reported, for a specific waste stream

02

## APPENDIX M

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Information Only

**APPENDIX M  
MWIR CODE DESIGNATIONS AND DESCRIPTIONS**

Code	Description	Code	Description
D001A	High TOC Ignitable Liquids	F001-F005	Pharmaceutical Industry Wastewaters
D001B	Descr. Based on 40 CFR 261.21, High TOC Subcat., Managed CWA	F005A	Spent Nonhalogenated Solvents
D001C	Descr. Based on 40 CFR 261.21, High TOC Subcat., Non-CWA	F005B	Listed for 2-Nitropropane
D002A	Acid, Alkaline, & Other Subcat Based on 40 CFR 261.22 CWA	F005C	Listed for 2-Ethoxyethanol
D002B	Acid, Alkaline, & Other Subcat Based on 40 CFR 261.22 Non-CWA	F025A	Light Ends
D002C	High Level Wastes	F025B	Spent Filters/Aids and Desiccants
D003A	Reactive Cyanides	K006A	Anhydrous
D003B	Reactive Sulfides	K006B	Hydrated
D003C	Explosives	K061A	High Zinc
D003D	Water Reactives	K061B	Low Zinc
D003E	Other Reactives	K069A	Calcium Sulfate
D004A	TCLP Toxic for Arsenic	K069B	Non Calcium Sulfate
D004B	High Level Wastes	K071A	Low Mercury
D005A	TCLP Toxic for Barium	K071B	High Mercury
D005B	High Level Wastes	K106A	Low Mercury
D006A	TCLP Toxic for Cadmium	K106B	High Mercury
D006B	Cadmium-containing Batteries	K106C	High Mercury Residues from RMERC
D006C	High Level Wastes	K106D	Low Mercury Residues from RMERC
D007A	TCLP Toxic for Chromium	K106E	Low Mercury Residues
D007B	High Level Wastes	K106F	Wastewaters
D008A	TCLP Toxic for Lead	P065A	High Mercury Incinerator or RMERC Residues Containing Mercury

600

**APPENDIX M  
MWIR CODE DESIGNATIONS AND DESCRIPTIONS**

D008B	Lead Acid Batteries	P065B	Residues That Are Not Incinerator or RMERC Residues
D008C	Radioactive Lead Solids	P065C	Low Mercury RMERC Residues Containing Mercury Fulminate
D008D	High Level Wastes	P065D	Incinerator Residues Containing Mercury Fulminate
D009A	TCLP Toxic for Mercury	P065E	Wastewaters
D009B	High Mercury (Contains Organics)	P092A	High Mercury Incinerator or RMERC Residues Containing Phenyl Mercury Acetate
D009C	High Mercury (Contains Inorganics)	P092B	Residues That Are Not Incinerator or RMERC Residues
D009D	Elemental Mercury Contaminated with Radioactive Materials	P092C	Low Mercury RMERC Residues Containing Phenyl Mercury Acetate
D009E	Hydraulic Oil Contaminated with Mercury Radioactive Material	P092D	Incinerator Residues Containing Phenyl Mercury Acetate
D009F	High Level Wastes	P092E	Wastewaters
D010A	TCLP Toxic for Selenium	U151A	High Mercury Residues from RMERC
D010B	High Level Wastes	U151B	Low Mercury Residues from RMERC
D011A	TCLP Toxic for Silver	U151C	Low Mercury Residues
D011B	High Level Wastes	U151D	Radioactive Elemental Mercury