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U.S. DEPARTMENT OF ENERGY INTERIM MIXED WASTE INVENTORY REPORT: WASTE STREAMS, TREATMENT CAPACITIES AND TECHNOLOGIES VOLUME 4: SITE SPECIFIC-OHIO THROUGH SOUTH CAROLINA APRIL 1993

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U.S. Department of Energy Interim Mixed Waste Inventory Report: Waste Streams, Treatment Capacities and Technologies

April 1993

Volume 4

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U.S. Department of Energy
Interim Mixed Waste Inventory Report: Waste Streams, Treatment Capacities and Technologies

Volume I - Overview
Volume II - Site Specific-California through Idaho
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23.0 OHIO

There are five Ohio facilities that generate, expect to generate, and/or store DOE-managed mixed waste.

- 23.1 Battelle Columbus Laboratories
- 23.2 Fernald Environmental Management Project
- 23.3 Mound Plant
- 23.4 Portsmouth Gaseous Diffusion Plant
- 23.5 RMI, Titanium Company

Figure 23-1 shows the location of these facilities.

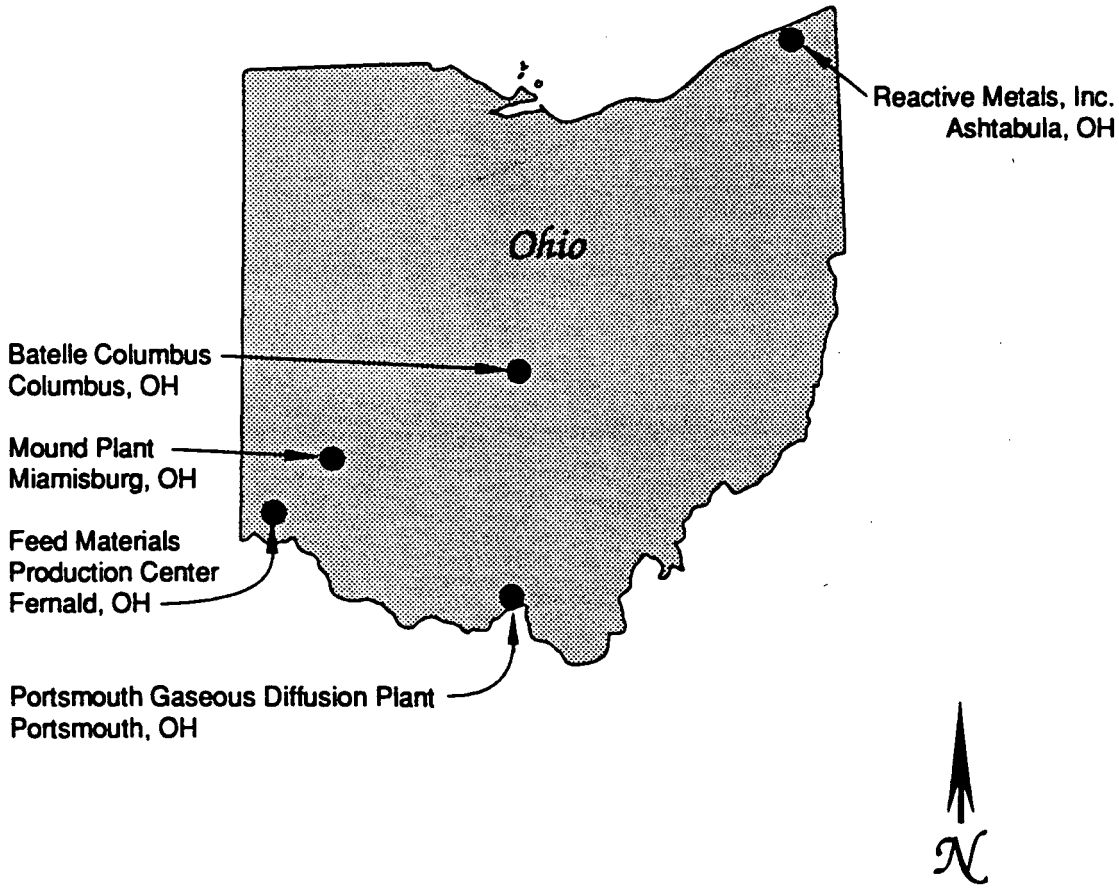

Figure 23-1. Ohio Facilities that Generate, Expect to Generate, and/or Stores DOE-managed Mixed Waste.

23.1 Battelle Columbus Laboratories

Battelle Columbus Laboratories consists of 2 major research complexes, 1 in the city of Columbus and 1 about 24 km west of Columbus in rural Madison County, Ohio (Figure 23-1). Atomic energy research and development activities have been performed at Battelle for the DOE and its predecessor agencies (the Atomic Energy Commission and Manhattan Engineer District) since 1943. The King Avenue (Columbus) site houses corporate offices and general research laboratories. Portions of the site contain radioactively contaminated research facilities and equipment. Most of the contamination consists of small amounts of naturally occurring radioisotopes (uranium and thorium) and activation products. The West Jefferson (Madison County) site contains a number of facilities formerly dedicated to nuclear research. In addition to contamination similar to that at the Columbus site, the West Jefferson site contains a number of hot cells that are highly contaminated. The bulk of transuranic, mixed-fission- product, and activation-product contamination is confined to 1 area of that site.

23.1.1 Mixed Waste

As of December 1992, no mixed wastes were being stored at Battelle Columbus. The only mixed waste generated at the site will be produced during the environmental restoration activities. Recently, the restoration activity has resulted in the generation of a small quantity of mixed waste. There is no high level or mixed Transuranic (MTRU) waste at Battelle Columbus. Small amounts of MTRU could be generated during remediation of the hot cell.

23.1.2 Treatment Facilities

There are no treatment facilities at Battelle Columbus.

23.1.3 Technology Development

There is no site-specific technology development for Battelle Columbus.

23.1.4 Environmental Restoration Program

Portions of 15 buildings and associated soil areas are radioactively contaminated as a result of previous work under government contract. These areas are expected to be decontaminated and released to Battelle for other use without radiological restrictions. Environmental restoration accomplishments to date include completing the decontamination of 4 buildings including Building 9 on the King Avenue campus and 3 buildings at the West Jefferson site; completing 7 low-level waste shipments to Hanford, Washington and upgrading the project radiation protection program to meet the requirements of the DOE Radcon Manual. Decontamination and decommissioning of the facilities is ongoing, and plans include removing waste (including water in the hot cell storage/transfer pool and sump sludge), equipment, and fixtures from the contaminated buildings and remediating sewer lines. A relatively modest amount of mixed waste is expected to be generated by these activities. More detailed information on the contaminated media associated with environmental restoration activities is in Chapter 2.

23.2 Fernald Environmental Management Project

The Fernald Environmental Management Project (FEMP) is located in southwestern Ohio, approximately 17 miles northwest of downtown Cincinnati, near the communities of Miamitown and Ross (Figure 23-1). Of the total site area of 1050 acres, 850 acres are in Crosby Township of Hamilton County and 200 acres are in Morgan and Ross Townships of Butler County, Ohio. The site is owned by the DOE, and is currently operated by Fernald Environmental Restoration Management Corporation. The site employs over 2000 people.

The FEMP facility was built to process uranium ore concentrates into high purity uranium-metal products. A wide variety of chemical and metallurgical process steps supported manufacturing of uranium-metal products for use at other DOE sites. Because of a sharp reduction in demand for uranium-metal products by user sites beginning in late 1988, the Fernald site steadily reduced its production. On July 10, 1989, after more than 36 years of manufacturing uranium-metal products for U.S. defense programs, production operations were suspended to refocus site resources on environmental restoration. The mission of the FEMP site is now environmental restoration and waste management.

Because of the change in site mission from production to clean up, the management and financial responsibility for the FEMP site was transferred from the DOE Defense Programs (DP) to the Office of Environmental Restoration and Waste Management (EM) in October 1990.

In July 1990, the EPA and the DOE entered into a Consent Agreement establishing milestone schedules for the completion of necessary studies to support the CERCLA cleanup process. The agreement also established schedules for implementing near term cleanup actions while final cleanup solutions were being evaluated and selected. In September 1991, the DOE and EPA jointly signed the Amended Consent Agreement establishing revised milestones for the completion of the required studies and identifying a series of new, near-term actions for implementation by DOE.

A Consent Decree was signed by the State of Ohio and the DOE in December 1988, establishing milestones to bring the FEMP into full compliance with RCRA and other regulatory requirements. In January 1993 amendments establishing additional requirements regarding the management of hazardous waste were made to the Consent Decree.

23.2.1 Mixed Waste

23.2.1.1 High-Level Waste

There is no high-level waste currently stored at FEMP and none will be generated in the next 5 years.

23.2.1.2 Mixed Transuranic (MTRU) Waste

There is no MTRU waste currently stored at FEMP and none will be generated in the next 5 years.

23.2.1.3 Mixed Low-Level Waste

Most of the waste currently stored at the FEMP facility is the result of the uranium processing operations conducted over a 36-year period. Some waste streams have been generated as a result of environmental restoration activities. FEMP mixed low-level waste (MLLW) consists of process residues, solvents, construction rubble, grit blast residues, and miscellaneous liquid and solid waste. The FEMP has

completed waste characterization activities for the majority of waste that is stored on site. When possible wastes have been characterized based on knowledge of the process from which they were derived; although sampling and analysis have also been used to characterize waste.

All of the mixed waste stored at the FEMP is low-level waste. No transuranic or high-level waste has been generated at Fernald. The FEMP waste is classified as contact-handled, containing low concentrations of alpha-emitting radionuclides in the waste matrix. As a result of the FEMP mission, the radionuclide most predominantly found in the FEMP mixed waste is uranium.

The FEMP has 283 waste streams making up the approximately 3,500,000 kg (about 3,100 m^3) of MLLW in storage as of December 31, 1992 (Table 23.2-1). Approximately 54 percent of the waste in storage consists primarily of sludges and residues generated from the uranium metal production processes. Approximately 32 percent of the waste currently in storage at the FEMP can be classified as aqueous or organic liquids. About 65 percent of the mass and 68 percent of the volume of waste stored at the FEMP is subject to RCRA Land Disposal Restrictions and requires treatment before disposal.

Since production activities at the Fernald facility have been halted, future generation of waste will be due solely to the environmental restoration activities that will be conducted at the site. No waste will be generated from the process operations. In all cases, increased effort has been devoted to minimizing hazardous and radioactive wastes at FEMP.

23.2.2 Treatment Facilities and Technologies

Treatment technologies for mixed wastes stored on site have been identified for all FEMP waste streams based on RCRA LDR requirements. The following is a summary of the LDR treatment technologies assigned for the FEMP mixed waste streams currently in storage.

FEMP reports a current waste volume of approximately 1700 m^3 requiring incineration. Some of this waste will be sent to the Toxic Substances Control Act (TSCA) Incinerator at the K-25 site outside of Oak Ridge Tennessee. Incineration facilities for the remaining waste have not been identified. Ten percent of the waste to be incinerated is estimated to require further stabilization before disposal.

Approximately 700 m^3 of the FEMP waste currently in storage requires stabilization. Stabilization could be vitrification, cementation, polymer fixation, or some sort of chemical fixation. A small amount of the FEMP wastes requires metals recovery before disposal and about 20 m^3 requires wastewater treatment. Specific facilities have not been identified to perform these treatments.

It is important to note that mixed waste stored on site is included in the environmental restoration program governed by CERCLA. As part of the CERCLA RI/FS process, the prescribed RCRA LDR technologies will be evaluated along with other potential technologies and general response actions (institutional controls, containment, disposal). The preferred technologies will be selected for the final remedial action.

Table 23.2.1
Mixed Wastes at Fernald Environmental Management Project

Waste Type/Matrix	Number of Waste Streams	Inventory		Number of Waste Streams	Five-Year Projection	
		(m^3)	(kg)		(m^3)	(kg)
WASTE TYPE -- MLLW						
CH, Organic Liquids	75	160.77	130,070.65	19	76.45	36,661.00
CH, Aqueous Liquid	17	832.40	1,154,405.00	3	23.80	19,318.00
CH, Organic Sludges/particulates	47	958.76	845,372.00	1	1.40	795.00
CH, Inorganic Sludges/particulates	44	726.74	1,056,211.00	1	1.04	1,136.00
CH, Soils	17	33.30	44,316.00	0	0.00	0.00
CH, Organic Debris	10	4.80	2,887.00	2	2.50	341.00
CH, Inorganic Debris	31	311.60	250,305.30	3	11.47	2,545.00
CH, Heterogeneous Debris	30	40.60	26,043.00	7	32.16	4,318.00
CH, Lab Packs Without Metals	2	0.40	23.00	0	0.00	0.00
CH, Reactive Metals	3	37.70	14,279.00	0	0.00	0.00
CH, Compressed Gases	1	0.20	13.60	0	0.00	0.00
CH, Liquid Mercury	1	<0.10	20.00	1	<0.10	91.00
CH, Elemental Lead	1	<0.10	8.00	0	0.00	0.00

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Table 23.2.1 (page 2)
Mixed Wastes at Fernald Environmental Mangement Project

Waste Type/Matrix	Number of Waste Streams	Inventory		Number of Waste Streams	Five-Year Projection	
		(m^3)	(kg)		(m^3)	(kg)
WASTE TYPE -- MLLW						
CH, Batteries (lead Acid, Cadmium)	3	0.60	528.00	2	2.20	1,591.00
CH, Other	1	0.20	9.00	0	0.00	0.00
Sub-Total MLLW:	283	3,108.10	3,524,490.55	39	151.11	66,796.00
TOTAL:	283	3,108.10	3,524,490.55	39	151.11	66,796.00

23.2.2.1 Existing Treatment Facilities

One mixed waste treatment process is currently in operation at FEMP (Table 23.2-2). This is a batch treatment operation to process approximately 200,000 gallons of uranyl nitrate hydrate (UNH) stored in a variety of tanks at the FEMP as a CERCLA removal action. The UNH will be converted to a stable filter cake that can be stored in drums. UNH is a liquid with a low pH and high levels of uranium resulting from the processing of high grade uranium ores using nitric acid and a filtering operation in preparation to extract the uranium in the form of solid, uranium oxide. UNH was declared a hazardous waste because of the characteristic of corrosivity and the presence of chromium and barium. During treatment, the solution will be blended to a uniform mixture, pH adjusted and precipitation accomplished using magnesium hydroxide and filtering the slurry through a rotary vacuum filter press. The solid material from this process will be drummed. The liquid will be sampled and if acceptable discharged through FEMP water treatment system if the levels are below National Pollutant Discharge Elimination System permit criteria.

Processing of UNH began in 1992 and will continue in 1993. The conversion to solid form will be conducted in a series of 10 or more batches, each of which will be designed to mix solutions from 2 or more batch tanks that will satisfy the enrichment criteria of less than 1 percent uranium-235 and concentration standards. The solid material generated from this treatment will be a LLW, not a MLLW.

FEMP has a decontamination and decommissioning operation and a wastewater treatment facility designed to handle low-level, radioactive waste. These facilities are not intended to treat mixed waste.

23.2.2.2 Planned Treatment Facilities

FEMP is currently planning 2 pilot-scale treatment facilities for mixed waste, the Minimum Additive Waste Stabilization (MAWS) facility and the Soil Washing Process Facility (Table 23.2-3). Both facilities are part of the CERCLA restoration activities being conducted at the site and are discussed below.

23.2.2.3 Treatment Facility Summary

Tables 23.2-2 and 23.2-3 provide a comprehensive summary of the existing and planned mixed waste treatment facilities at the FEMP. One process, the UNH batch treatment operation, is currently in use and 2 facilities, the MAWS and the Soil Washing Process Facility, are planned. Table 23.2-4 provides a summary of the waste acceptance parameters for these facilities.

23.2.3 Technology Development

23.2.3.1 General

A large part of the work that will be performed under CERCLA at FEMP is technology development. Currently, technologies are being evaluated in support of records of decision for remedial action at the FEMP site. Some technology demonstrations and feasibility studies are already being conducted including the MAWS and the soil washing process. These activities are discussed below and are also presented in Appendix B.

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Table 23.2-2
Fernald Environmental Management Project
Mixed Waste Treatment Facilities
Currently in Use for Mixed Wastes

Facility/System	Treatment Type(s)	Allowable Waste		Ident. Of MW Streams To Be Treated	Normal Operating Capacity (m3/yr)
		Radioactive Type(s) *	Physical/Chemical Matrix		
UNH Treatment Facility	Neutralization, Chemical Precipitation, Filtration	MLLW, CH	Liquid	844	795.0

* ALPHA refers to transuranic alpha greater than 10 nCi/g

Table 23.2-3
Fernald Environmental Management Project
Mixed Waste Treatment Facilities
Planned or Under Construction for Mixed Wastes

Facility/System	Treatment Type(s)	Allowable Waste		Ident. Of MW Streams To Be Treated	Design Capacity (m3/yr) **	Date Avail. For Treating MW **
		Radioactive Type(s) *	Physical/Chemical Matrix			
Minimum Additive Waste Stabilization Facility (1)	Virtification	MLLW, CH	Soil, Sludges	OU1 Sludges, FEMP Soils	To Be Determined	Year To Be Determined
Soil Washing Process Facility (2)	Soil Washing	MLLW, CH	Soil	OU5 Soils	To Be Determined	Year To Be Determined

* ALPHA refers to transuranic alpha greater than 10 nCi/g

** Because DOE is still in the planning/conceptual stage, in the design stages, or in the construction stage for these facilities, schedules and capacities are subject to changes based on the availability of funds, results of treatability studies, permit issuance, etc.

Note (1): The overall design capacities for the MAWS system are: bench test=55 m3/yr, pilot test=4,414 m3/yr, and full scale=40,200 m3/yr. Date available for the MAWS system is 6/93 for the bench test. Dates available for the pilot test and full scale operation are to be determined. Bench test 6/93.

Note (2): Design capacity: Batch-1 continuous-441. Date available: Batch-4/93 continuous-1994. Planned: Batch 4/93, continuous 1994.

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Table 23.2-4
Fernald Environmental Management Project
Current and Planned Facilities - Treatement Category
Mixed Waste Treatment Facilities

Facility/System	Operating Status *	Feed Types	Final Waste Form	HLW MTRU MLLW	Alpha **	RH CH	Hg	Other Toxic Metals	Toxic Organics
Minimum Additive Waste Stabilization Facility	Planned, Year To Be Determined	Soil, Sludges	Vitrified waste	MLLW		CH		√	√
Soil Washing Process Facility	Planned, Year To Be Determined	Soil	To Be Determined	MLLW		CH		√	√
UNH Treatment Facility	Operating	Liquid	filter cake water	MLLW		CH			

* Because DOE is still in the planning/conceptual stage, in the design stages, or in the construction stage for these facilities, schedules and capacities are subject to changes based on the availability of funds, results of treatability studies, permit issuance, etc.

** Transuranic alpha greater than 10 nCi/g.

23.2.3.2 Site Specific Technology Development Activities

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The MAWS technology demonstration program is an integrated waste treatment system. Vitrification is the core technology which will be used for stabilization of waste sludges and other contaminated material. The process technology is integrated with soil washing and a water treatment system. Ion exchange will be used to treat contaminated water from the soil washing process. Concentrated residual contaminated soils from the soil washing unit are used as the silica source for the vitrification process. This reduces the operational costs of the vitrification unit and yields a net reduction in waste form volume. The ultimate goal of the MAWS program is to demonstrate the cost-effectiveness and feasibility of waste volume reduction by the integrated treatment process. The initial MAWS Bench-scale Unit will treat sludges, FEMP soils, and contaminated water resulting from soil washing and vitrification. Additional information on the source materials for these demonstrations can be found in the Environmental Restoration (ER) Program section.

Goals of this process are to effectively wash soil and treat water to specified levels as well as to produce a glass form that, at a minimum, passes the EPA TCLP test. In addition, it is expected that the vitrification process will be proven to effectively remove organics (1,1,1-trichloroethane) for which some of the ER Program waste is currently listed as a hazardous (mixed) waste.

A demonstration of the 300 kg melter system will be performed at the Fernald site in FY 93 to support ER Program record of decision documents due in December 1994. If chosen as best treatment, additional funding for scale-up will be allocated. The pilot plant, if chosen is planned to startup in 1996.

The Soil Washing Process Facility is currently being constructed for a treatability study as part of the ER Program Remedial Investigation/Feasibility Study (RI/FS) for Operable Unit 5 (OU5). This is a separate facility and study from the MAWS soil washing described above. The purpose of this study is to generate data for the RI/FS detailed analysis of remediation alternatives. A primary consideration is to integrate the soil washing treatability technology being evaluated in this study with the other technology evaluations being conducted for on-site remediation of OU5.

Soil washing is a physical-chemical treatment process that initially involves the separation of soil into different particle-size fractions. Reagent formulations in the washing solutions are used in the extraction of radionuclides and organic compounds from these different size fractions. The contaminants may be separated from the wash stream into a concentrated residue for further treatment (e.g., stabilization or vitrification).

All design work for the Soil Washing Process Facility and support utilities has been completed. All project related documentation and startup support activities are on schedule. The installation of the soil washing pilot plant is also on schedule. Anticipated system startup is projected for April, 1993.

23.2.3.3 Site Specific Technology Development Summaries

Site-specific technology development activities with numerically indexed narrative descriptions (following the waste profile sheets) and tables of titles are presented in the following sections of this chapter as well as in Appendix B. The following site-specific technology development activities lists site-specific technology development activities which are potentially applicable to the treatability groups and BDATs identified in Chapter 6.0 are listed below. Additionally, crosscutting technology development activities not assigned to treatability groups are included. Where BDAT is indicated as NA, or is blank, the

technology development activity does not link to specific BDAT RCRA treatment functions, but is intended to provide other supporting functions.

Site-Specific Technology Development Activities

(by BDAT:
by Summary Technology (Tech) Area ID:
by ID number: (references numerically indexed narrative descriptions presented later in this chapter and Appendix B)
by Title:)

BDAT: HLVIT
Summary Tech Area ID: waste destruction & stabilization
56 Minimum Additive Waste Stabilization (MAWS)

BDAT: NEUTR
Summary Tech Area ID: chemical physical treatment
410 Soil Washing Treatability Study

BDAT: PRECP
Summary Tech Area ID: chemical physical treatment
410 Soil Washing Treatability Study

BDAT: RMETL
Summary Tech Area ID: chemical physical treatment
410 Soil Washing Treatability Study

23.2.4 Environmental Restoration Program

The current mission of the FEMP is environmental restoration. The goal of environmental restoration is to protect human health by limiting potential exposures to radioactive and hazardous materials. The RI/FS process along with the waste management program are the 2 main FEMP activities geared toward site cleanup. The RI/FS process is regulated by CERCLA legislation and is conducted according to U.S. EPA guidance and regulations and the provisions of the Amended Consent Agreement. The waste management program remains a key element in preventing the release of pollutants into the environment. Generally, the program seeks to characterize, store, treat (as necessary) and dispose of radioactive, hazardous, mixed and sanitary waste from the site in a safe and environmentally sound manner while complying with all applicable regulations. The management of hazardous waste is regulated by the state of Ohio; the FEMP has submitted a RCRA Part B application to the state seeking a RCRA permit for on-site storage.

In order to remediate facilities such as waste pits, sludge ponds, groundwater, storage silos, and process buildings, the FEMP began its RI/FS in 1986. The RI/FS divides facilities to be cleaned up into "Operable Units". The FEMP has 5 operable units that will ultimately require remediation. The first, Operable Unit (OU) 1, includes some of the low-level radioactive waste storage areas used during uranium-metal production. OU1 covers approximately 37 acres and consists of 6 waste pits, a burn pit, the clear well, berms, liners, and soil within the operable unit boundary. OU2 includes other FEMP waste storage areas such as the Flyash piles, Lime Sludge Ponds, Solid Waste Landfill, and the Southfield Disposal Area. OU3 is the former production area and production-associated facilities and equipment. OU3 includes, but is not limited to, all above- and below-ground structures, equipment, utilities, drums,

OU3 includes, but is not limited to, all above- and below-ground structures, equipment, utilities, drums, tanks, solid waste, waste product, thorium, effluent line, K-65 transfer line, wastewater treatment facilities, fire-training facilities, scrap metal piles, feedstocks, and the coal pile. OU4 consists of 4 silos, a decant sump system, a buried concrete trench, and the surrounding soils. Two silos contain residues from the processing of pitchblende uranium ores at the FEMP and at St. Louis (Mallinckradt Chemical Works). One silo contains dried uranium-bearing refinery raffinates generated from Fernald production operations. One silo has not been used and remains empty. OU5 encompasses environmental media: groundwater (including perched groundwater), surface water, sediments, soils (not included in the other operable units), flora, and fauna. In particular, OU5 includes a uranium contamination plume that is slowly spreading south from the site.

The amount of MLLW to be generated over the next 5 years due to environmental restoration activities was estimated by the site as 170,000 m^3. It is estimated that the largest volume of waste will be soils contaminated with uranium, heavy metals, and organic contaminants. Additional information on Environmental Restoration activities is included in Chapter 2.

During the restoration process, the FEMP is implementing an active waste minimization program to reduce the volume of waste generated. Motivation for waste reduction is found in both federal and state regulations, U.S. DOE policies and guidelines. Increased costs and liabilities associated with the management of wastes and limited disposal options have been a strong impetus for minimizing waste generation. The restoration program is being conducted according to "Good Operating Practices".

WASTE

PROFILE

SHEETS

Fernald Environmental Management Project

FEMP-WPS-1

April 1993

ROADMAP TO WASTE PROFILE SHEETS (WPS)

Waste Profile Sheets (WPS) have been compiled in this report for each of the mixed waste streams identified at the different DOE sites. Each WPS is a concise summary of the information required by the FFCAct-1992, with waste stream specific data primarily derived from the Waste Management Information System (WMIS) database. Each WPS consists of the following items:

Header: The information in the header in each WPS includes the State, the official name of the site, an identification number, an identifying waste stream name, the waste type, and the waste matrix. The identification number is either a number assigned by the WMIS database or a number assigned by the site. The waste stream name is a unique identifier which corresponds to the name used in the WMIS database, or is assigned by the site. The waste type is either HLW, MTRU, or MLLW. The waste matrix corresponds to the categories (or their further subdivisions) defined earlier based on the physical and chemical form of the waste.

Waste Stream Description and Source: This section of the WPS presents a short description of the source of the waste and the waste stream characteristics.

Inventory Table: The inventory table in each WPS reports the volume (m^3) and/or mass (kg) of each waste stream currently in storage, and projected to be generated in the next five years. The table also indicates the date assumed in calculating the current and projected inventories. As required by the FFCAct-1992, the table also differentiates between waste not subject to LDR and that subject to LDR for the current inventory.

Treatability Group: This section lists the name of the treatability group to which the waste stream belongs.

Treatment Status, Technology Status: This section of the WPS lists the status of the technology that could be applied to the waste stream for compliance with the LDR. This section provides information on if the waste stream is currently being treated, and if technology options and facilities for the treatment exist.

Radiation Characteristics Section: This section of the WPS provides additional information on the radiological characteristics of the waste (in addition to characterizing the waste stream as HLW, MTRU, or MLLW). This section of the WPS specifies whether the waste stream is contact handled or remote handled, if the radionuclides are alpha or beta/gamma emitters, and if they contain activation products.

Radiation Effects Section: As required by the FFCAct-1992, this section of the WPS lists possible effects of the radiological characteristics of the waste stream on treatment technologies that could be applicable to that waste stream. For example, radiation levels may require remote handling of the waste and affect the design and operation of the treatment facility. The presence of volatile radionuclides may require the containment of all off-gases from the treatment system.

Waste Minimization Activities: As required by the FFCAct-1992, this section of the WPS provides information on the waste minimization practices being used for the waste stream. This section provides information on if the waste minimization practices include good operating practices, technology changes, raw material changes, product changes, etc.

EPA Code: This table of the WPS reports the EPA hazardous waste codes applicable to the waste stream, the basis for assigning the codes (process knowledge or sampling/analysis), the LDR basis (which is either technology based or concentration based), and the BDAT for each of the EPA hazardous waste codes.

In summary, the WPS for each waste stream, along with the site sections in the report for each State (Section B), summarize the site-specific information required by the FFCAct-1992.

State: Ohio	**ID #: 0000000091**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: MERCURY SPILL CLEANUP RESIDUE	
Matrix: Inorganic Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Mercury spill cleanup residue; 749 Maintenance Section, Instrument Shop.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	6.0	0.000	0.000	0.200	6.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams. Suggested technologies include metals recovery and chemical fixation.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000091**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: MERCURY SPILL CLEANUP RESIDUE	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U151	Tech.	Amalgamation

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000180
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: RAGS SOLVENT
Matrix: Organic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Non-recoverable trash for storage or shipment from maintenance section, paint shop.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	25.0	0.000	0.000	0.200	25.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio	**ID #: 0000000180**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: RAGS SOLVENT	
Matrix: Organic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 0000000194**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SLUDGES, SOLVENT - TRICHLOR, PERCHLOR	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

Waste Stream Description and Source:
Sludges, solvent - trichlor, perchlor, etc., ; Building 45, water treatment.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	195.0	0.200	195.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D037		Not currently prohibited under the LDR Program.

State: Ohio	**ID #: 0000000376**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY RAGS	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Oily rags; 503 Plant 5, General, Oil Storage Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	43.0	0.200	43.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams. Suggested treatment processes include thermal treatment using a rotary kiln incinerator and chemical treatment using chemical fixation.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000376**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY RAGS	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000379

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SPENT 1,1,1-TRICHLOROETHANE

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Spent 1,1,1-trichloroethane; 502 Plant 5, General, Maintenance Shop.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	77.0	0.200	77.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams. Suggested treatment processes include using liquid injection incinerator and chemical fixation.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000000379**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SPENT 1,1,1-TRICHLOROETHANE

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio | ID #: 0000000380

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: RAGS WITH 1,1,1-TRICHLOROETHANE

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Rags with 1,1,1-trichloroethane; 502 Plant 5, General, Maintenance Shop.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	6.0	0.000	0.000	0.200	6.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams. Suggested treatment processes include thermal treatment using a rotary kiln incinerator, and chemical treatment using chemical fixation.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000380**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: RAGS WITH 1,1,1-TRICHLOROETHANE	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000382

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DRY CELL BATTERIES

Matrix: Batteries (lead acid, cadmium) | Waste Type: MLLW

Waste Stream Description and Source:
Dry cell batteries; 500.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	220.0	0.000	0.000	0.200	220.0	0.000	0.000

Treatability Group:
MLLW CH, Batteries (lead acid, cadmium), Toxic Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams. Suggested technologies include metals recovery and chemical fixation.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000382**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: DRY CELL BATTERIES	
Matrix: Batteries (lead acid, cadmium)	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002B	Tech.	Deactivation
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration

State: Ohio | ID #: 0000000383

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: X-RAY FIXER & DEVELOPER, CLEAR LIQUID

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:

X-ray fixer & developer, clear liquid moderate acidic solution; 755 Maintenance Section, Quality & Safety Department.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	123.0	0.200	123.0	0.000	0.000

Treatability Group:

MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams. Suggested treatment includes silver recovery.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio **ID #: 0000000383**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: X-RAY FIXER & DEVELOPER, CLEAR LIQUID

Matrix: Aqueous Liquid **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D011	Conc.	Stabilization

State: Ohio	ID #: 0000000385
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SPENT SOLVENTS	
Matrix: Organic Liquids	Waste Type: MLLW

Waste Stream Description and Source:
Spent solvents; 738 Service Bldg. and Admin. Bldg., Garage.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	108.0	0.200	108.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams. Suggested treatment processes include liquid injection incinerator.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000000385

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SPENT SOLVENTS

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio | ID #: 0000000387

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OIL SOAKED RAGS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Oil soaked rags; 738 Service Bldg. and Admin. Bldg., Garage.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.2	269.0	1.2	269.0	8.4	1,818.0

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio	**ID #: 0000000387**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OIL SOAKED RAGS	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D010	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000388

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: USED OIL

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Used oil; 739 Service Bldg. and Admin. Bldg., Garage Oil.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	6.7	5,320.0	6.7	5,320.0	22.8	18,182.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams. Suggested treatment processes include using liquid injection incinerator and chemical fixation.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio | ID #: 0000000388

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: USED OIL

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D010	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

State: Ohio | ID #: 0000000389

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY RAGS FROM WATER TREATMENT AREA

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Non-recoverable trash for storage or shipment from Plant 6, Water Treatment Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	25.0	0.200	25.0	2.3	273.0

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000389**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY RAGS FROM WATER TREATMENT AREA	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008A	Tech.	Secondary Lead Smelting
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration
D010	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 0000000390**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY SEMI-SOLID	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

Waste Stream Description and Source:
Oily semi-solid; 655 Plant 6, Water Treatment Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.800	470.0	0.800	470.0	1.4	795.0

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio | ID #: 0000000390

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY SEMI-SOLID

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

State: Ohio | ID #: 0000000393

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LUBRICATING OIL FROM REDUCTION REMELT

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated insoluble oil; Plant 5, General, Oil Storage Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	317.0	0.400	317.0	2.1	1591.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio
ID #: 0000000393
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: LUBRICATING OIL FROM REDUCTION REMELT
Matrix: Organic Liquids
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008A	Tech.	Secondary Lead Smelting

State: Ohio | ID #: 0000000396

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PAINT THINNER RAGS

Matrix: Organic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Paint thinner rags; 748 Maintenance Section, Paint Shop.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	71.0	0.400	71.0	1.3	227.0

Treatability Group:
MLLW CH, Organic Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio
ID #: 0000000396
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: PAINT THINNER RAGS
Matrix: Organic Debris
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration
F003	Conc.	Incineration
F005A	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000397

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: 1,1,1,-TRICHLOROETHANE (CLEANING SOLVENT)

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

1,1,1,-trichloroethane (cleaning solvent); 768 Building 45, Boiler Plant.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	103.0	0.200	103.0	1.000	455.0

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio | ID #: 0000000397

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: 1,1,1,-TRICHLOROETHANE (CLEANING SOLVENT)

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio | ID #: 0000000398

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SOLVENT RAGS

Matrix: Organic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Solvent rags; 768 Building 45, Boiler Plant.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	19.0	0.200	19.0	1.2	114.0

Treatability Group:
MLLW CH, Organic Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio	**ID #: 0000000398**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SOLVENT RAGS	
Matrix: Organic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000399

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY RAGS, PADS AND TRASH FROM BOILER

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Non-recoverable trash for storage or shipment; Building 45, Boiler Plant Oil Storage.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	49.0	0.200	49.0	0.963	227.0

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000399**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY RAGS, PADS AND TRASH FROM BOILER	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008A	Tech.	Secondary Lead Smelting
D039		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000400

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: USED OIL FROM MAINTENANCE

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Used oil from maintenance; 769 Building 45, Boiler Plant Oil Storage.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	105.0	0.200	105.0	1.1	568.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio **ID #: 0000000400**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: USED OIL FROM MAINTENANCE

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D008B	Conc.	Stabilization
F001	Conc.	Incineration

4693

State: Ohio **ID #: 0000000402**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: USED OIL

Matrix: Organic Liquids **Waste Type: MLLW**

Waste Stream Description and Source:
Used oil; 203 Plants 2 & 3, General, Oil Storage Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.800	404.0	0.800	404.0	6.7	682.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio **ID #: 0000000402**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: USED OIL

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio | ID #: 0000000404

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY RAGS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Oily rags; 203 Plants 2 & 3, General, Oil Storage Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	59.0	0.400	59.0	1.6	227.0

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio	**ID #: 0000000404**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY RAGS	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000405

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DRY CELL BATTERIES

Matrix: Batteries (lead acid, cadmium) | Waste Type: MLLW

Waste Stream Description and Source:
Dry cell batteries; 241.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	134.0	0.200	134.0	1.1	682.0

Treatability Group:
MLLW CH, Batteries (lead acid, cadmium), Toxic Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio	**ID #: 0000000405**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: DRY CELL BATTERIES	
Matrix: Batteries (lead acid, cadmium)	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002B	Tech.	Deactivation
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration

State: Ohio | ID #: 0000000408

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: USED OIL

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Used oil; 747 Maintenance Section, Machine Shop Oil Storage.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	146.0	0.200	146.0	1.000	682.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio **ID #: 0000000408**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: USED OIL

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
F001	Conc.	Incineration

State: Ohio | ID #: 0000000410

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY RAGS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Oily rags; 747 Maintenance Section, Machine Shop Oil Storage.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	130.0	0.400	130.0	10.5	682.0

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio	**ID #: 0000000410**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY RAGS	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000412

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: 1,1,1-TRICHLOROETHANE

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

1,1,1-trichloroethane; 775 Building 45, Lab Maintenance Shop.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	10.0	0.200	10.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000000412**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: 1,1,1-TRICHLOROETHANE

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D006B	Conc.	Stabilization
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio | ID #: 0000000413

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: 1,1,1,-TRICHLORETHANE RAGS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
1,1,1,-trichloroethane rags; 775 Building 45, Lab Maintenance Shop.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	5.0	0.200	5.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000000413**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: 1,1,1,-TRICHLORETHANE RAGS

Matrix: Heterogeneous Debris **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration
D039		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000414

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: USED OIL

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Used oil; 776 Building 45, Lab Oil Storage Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	199.0	0.400	199.0	9.2	909.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio **ID #: 0000000414**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: USED OIL

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration
D039		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio | ID #: 0000000415

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY RAGS AND ABSORBENTS WD-40 AND VARIOUS OILS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Oily rags and absorbents WD-40 and various oils; 776 Building 45, Lab Oil Storage Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	36.0	0.200	36.0	6.3	227.0

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio ID #: 0000000415

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY RAGS AND ABSORBENTS WD-40 AND VARIOUS OILS

Matrix: Heterogeneous Debris Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000417

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: WIPES, RESINS, SOLIDS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Wipes, resins, solids; 733 Analytical Laboratory Hazardous Waste.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	88.0	0.200	88.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000417**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: WIPES, RESINS, SOLIDS	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D008B	Conc.	Stabilization
D022		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration
F003	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

4693

State: Ohio	ID #: 0000000418
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SPENT ACETONE	
Matrix: Organic Liquids	Waste Type: MLLW

Waste Stream Description and Source:
Spent acetone; 733 Analytical Laboratory Hazardous Waste.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.700	607.0	0.700	607.0	1.2	1,023.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

075

State: Ohio | ID #: 0000000418

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SPENT ACETONE

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
F003	Conc.	Incineration

4693

State: Ohio	ID #: 0000000419
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: XYLENE	
Matrix: Organic Liquids	Waste Type: MLLW

Waste Stream Description and Source:
Xylene; 733 Analytical Laboratory Hazardous Waste.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	114.0	0.200	114.0	1.000	455.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

077

State: Ohio	**ID #: 0000000419**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: XYLENE	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
F003	Conc.	Incineration

State: Ohio	**ID #: 0000000421**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: METHANOL	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Methanol; 733 Analytical Laboratory Hazardous Waste.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	704.0	0.200	704.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000000421**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: METHANOL

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
F003	Conc.	Incineration

State: Ohio | ID #: 0000000422

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SPENT METHYLENE CHLORIDE

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Spent methylene chloride; 733 Analytical Laboratory Hazardous Waste.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.019	15.0	0.000	0.000	0.019	15.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000000422

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SPENT METHYLENE CHLORIDE

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

State: Ohio	ID #: 0000000423
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: ELEMENTAL MERCURY	
Matrix: Liquid Mercury	Waste Type: MLLW

Waste Stream Description and Source:
Elemental mercury; 733 Analytical Laboratory Hazardous Waste.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.019	20.0	0.019	20.0	0.084	91.0

Treatability Group:
MLLW CH, Liquid Mercury, Toxic Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D009D	Tech.	Amalgamation

State: Ohio **ID #: 0000000425**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LABORATORY ACIDS (NITRIC AND CYCLOHEXANE)

Matrix: Organic Liquids **Waste Type: MLLW**

Waste Stream Description and Source:
Laboratory acids (nitric and cyclohexane); 733 Analytical Laboratory Hazardous Waste.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.500	345.0	0.500	345.0	0.098	68.0

Treatability Group:
MLLW CH, Organic Liquids

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio **ID #: 0000000425**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LABORATORY ACIDS (NITRIC AND CYCLOHEXANE

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D002A	Tech.	Deactivation

State: Ohio	**ID #: 0000000426**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: METHANOL AND CYCLOHEXANE MIXTURE	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Methanol and cyclohexane mixture; 733 Analytical Laboratory Hazardous Waste.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	2.9	2,065.0	2.9	2,065.0	5.6	4,091.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio **ID #: 0000000426**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: METHANOL AND CYCLOHEXANE MIXTURE

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
F003	Conc.	Incineration

State: Ohio	**ID #: 0000000428**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: ACETONITRILE IN WATER	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Acetonitrile in water; 733 Analytical Laboratory Hazardous Waste.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.019	0.454	0.019	0.454	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000428**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: ACETONITRILE IN WATER	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration

State: Ohio | ID #: 0000000432

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: ELEMENTAL MERCURY (SPILL CLEAN-UP)

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Elemental mercury (spill clean-up materials); 733 Analytical Laboratory Hazardous Waste.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.2	255.0	1.2	255.0	5.6	1,136.0

Treatability Group:
MLLW CH, Inorganic Debris

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U151B	* not specified	* not specified

State: Ohio	**ID #: 0000000432**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: ELEMENTAL MERCURY (SPILL CLEAN-UP)	
Matrix: Inorganic Debris	**Waste Type: MLLW**

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000433
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: AEROSOL SPRAY CANS PROPELLANT
Matrix: Compressed Gases | Waste Type: MLLW

Waste Stream Description and Source:
Non-recoverable trash for storage or shipment; Analytical Laboratory Hazardous Waste.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	13.6	0.000	0.000	0.200	13.6	0.000	0.000

Treatability Group:
MLLW CH, Compressed Gases, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio | ID #: 0000000433

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: AEROSOL SPRAY CANS PROPELLANT

Matrix: Compressed Gases | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001D	Tech.	Deactivation

State: Ohio | ID #: 0000000434

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SOLIDS CONTAMINATED BY LAB SAMPLES & MATERIALS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Solids contaminated by lab samples & materials; 733 Analytical Laboratory Hazardous Waste.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.000	238.0	1.000	238.0	2.4	682.0

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

4693

State: Ohio | ID #: 0000000434

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SOLIDS CONTAMINATED BY LAB SAMPLES & MATERIALS

Matrix: Heterogeneous Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D022		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration
F003	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio **ID #: 0000000438**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: HYDRAULIC OIL FROM BALER IN DRUM RECONDITIONING

Matrix: Organic Liquids **Waste Type: MLLW**

Waste Stream Description and Source:
Hydraulic oil from baler in drum reconditioning; 137 Plant 1, Drum Reconditioning, Drum Baler.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	177.0	0.000	0.000	0.200	177.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio **ID #: 0000000447**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: HYDRAULIC FLUID FROM FREIGHT ELEV. AT LAB BASEMENT

Matrix: Organic Liquids **Waste Type: MLLW**

Waste Stream Description and Source:
Liquid hydraulic fluid from freight elev. at lab basement; 730 Laboratory.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	207.0	0.000	0.000	0.400	207.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio **ID #: 0000000448**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SLUDGE, HYDRAULIC OIL FROM FREIGHT ELEVATOR

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

Waste Stream Description and Source:
Sludge, hydraulic oil from freight elevator; 730 Laboratory.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	260.0	0.000	0.000	0.200	260.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000448**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SLUDGE, HYDRAULIC OIL FROM FREIGHT ELEV. AT LAB BASEM.	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio	**ID #: 0000000456**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SLUDGE-LIKE, VERY STRONG SOLVENT ODOR	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Sludge-like, very strong solvent odor; 100 Plant 1.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	508.0	0.000	0.000	0.400	508.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000000456

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SLUDGE-LIKE, VERY STRONG SOLVENT ODOR

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio	**ID #: 0000000457**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OIL	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Oil; 100 Plant 1.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	224.0	0.000	0.000	0.200	224.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000457**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OIL	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio	**ID #: 0000000459**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: PAINT	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Paint; 135 Plant 1, Drum Reconditioning, Drum Painting Booth.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	205.0	0.200	205.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio	**ID #: 0000000459**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: PAINT	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
F001	Conc.	Incineration
F002	Conc.	Incineration
F003	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio	**ID #: 0000000460**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: LIQUID & SOLID WASTE SAMPLES	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Liquid & solid waste samples; 700 Waste Management.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	11.0	0.200	11.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000000460

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LIQUID & SOLID WASTE SAMPLES

Matrix: Heterogeneous Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D010	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 0000000471**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: PRESSURE TREATED WOOD IN 8 DRUMS	
Matrix: Organic Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Pressure treated wood in 8 drums; 705 Construction.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.000	241.0	1.000	241.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000471**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: PRESSURE TREATED WOOD IN 8 DRUMS	
Matrix: Organic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000478

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED OIL, SOLUBLE, FROM LATHE ON PLANT 64 PAD

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated oil, soluble, from lathe on plant 64 pad; 742 Procurement, Decontamination.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	144.0	0.000	0.000	0.200	144.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio **ID #: 0000000478**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED OIL, SOLUBLE, FROM LATHE ON PLANT 64 PAD

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000000479

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: USED PAINT THINNER

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Used paint thinner; 705 Construction.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	436.0	0.400	436.0	1.1	1,136.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

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State: Ohio | ID #: 0000000479

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: USED PAINT THINNER

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration
D011	Conc.	Stabilization
D035		Not currently prohibited under the LDR Program.
F003	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio	**ID #: 0000000485**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: KEROSENE	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Kerosene; 200 Plants 2 & 3.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	92.0	0.000	0.000	0.200	92.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000485**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: KEROSENE	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio	ID #: 0000000493
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: STENCILED GASOLINE	
Matrix: Organic Liquids	Waste Type: MLLW

Waste Stream Description and Source:
Stenciled gasoline; 100 Plant 1.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	58.3	0.200	58.3	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000493**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: STENCILED GASOLINE	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D018		Not currently prohibited under the LDR Program.

State: Ohio	**ID #: 0000000507**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: GASOLINE	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Gasoline; 300 Plants 2 & 3, Pilot Plant.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	112.0	0.200	112.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000507**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: GASOLINE	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D018		Not currently prohibited under the LDR Program.

State: Ohio	**ID #: 0000000508**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: PAINT THINNER	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Paint thinner; 300 Plants 2 & 3, Pilot Plant General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	220.0	0.200	220.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA. Thermal Treatment - Liquid injection incinerator

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000000508**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PAINT THINNER

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration

State: Ohio **ID #: 0000000514**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BAD PAINT FROM PAINT BOOTH

Matrix: Organic Liquids **Waste Type: MLLW**

Waste Stream Description and Source:
Bad paint from paint booth; 135 Plant 1, Drum Reconditioning, Drum Painting Booth.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.2	573.0	1.2	573.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000000514**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BAD PAINT FROM PAINT BOOTH

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
F001	Conc.	Incineration
F002	Conc.	Incineration
F003	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio	**ID #: 0000000517**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OIL DRY CONTAMINATED WITH OIL FROM BALER	
Matrix: Organic Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Oil dry contaminated with oil from baler; 137 Plant 1, Drum Reconditioning, Drum Baler.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	426.0	0.000	0.000	0.400	426.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000517**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OIL DRY CONTAMINATED WITH OIL FROM BALER	
Matrix: Organic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	ID #: 0000000527
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY RAGS, CLEAN UP MATERIAL, GLASS JAR	
Matrix: Organic Debris	Waste Type: MLLW

Waste Stream Description and Source:
Oily rags clean up material, glass jar; 742 Procurement, Decontamination.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	38.0	0.200	38.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000527**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY RAGS, CLEAN UP MATERIAL, GLASS JAR	
Matrix: Organic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000533

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PAINT (POSSIBLY GRAY EPOXY PAINT)

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Paint (possibly gray epoxy paint); 742 Procurement, Decontamination.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	130.0	0.200	130.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000533**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: PAINT (POSSIBLY GRAY EPOXY PAINT)	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration

State: Ohio | ID #: 0000000538

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING # 1508

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:
Boring # 1508; ASI.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	296.0	0.200	296.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000000538

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING # 1508

Matrix: Soils | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization

State: Ohio	**ID #: 0000000539**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: BORING # 1509	
Matrix: Soils	**Waste Type: MLLW**

Waste Stream Description and Source:
Boring # 1509; ASI.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	692.0	0.400	692.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000000539

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING # 1509

Matrix: Soils | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization

State: Ohio
ID #: 0000000540
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: BORING # 1512
Matrix: Soils
Waste Type: MLLW

Waste Stream Description and Source:
Boring # 1512; ASI.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	331.0	0.200	331.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000000540

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING # 1512

Matrix: Soils | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D011	Conc.	Stabilization

State: Ohio	**ID #: 0000000541**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: BORING # 1513	
Matrix: Soils	**Waste Type: MLLW**

Waste Stream Description and Source:
Boring # 1513; ASI.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	570.0	0.400	570.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000000541

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING # 1513

Matrix: Soils | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization

State: Ohio	ID #: 0000000542
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: BORING # 1514	
Matrix: Soils	Waste Type: MLLW

Waste Stream Description and Source:
Boring # 1514; ASI.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	305.0	0.200	305.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000000542**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING # 1514

Matrix: Soils **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization

State: Ohio | ID #: 0000000543

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING #1515, FROM THE FIRE TRAINING COURSE GROUNDS

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:
Boring #1515, from the fire training grounds; ASI.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	259.0	0.200	259.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio ID #: 0000000543

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING #1515, FROM THE FIRE TRAINING COURSE GROUNDS

Matrix: Soils Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization

State: Ohio	ID #: 0000000545
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: BORING # 1511	
Matrix: Soils	Waste Type: MLLW

Waste Stream Description and Source:
Boring # 1511; ASI.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	305.0	0.200	305.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio
ID #: 0000000545
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: BORING # 1511
Matrix: Soils
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization

State: Ohio **ID #: 0000000549**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CUTTING FLUID, ABSORBANT

Matrix: Heterogeneous Debris **Waste Type: MLLW**

Waste Stream Description and Source:
Cutting fluid, absorbant; 730 Laboratory.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	25.0	0.000	0.000	0.200	25.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000549**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CUTTING FLUID, ABSORBANT	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000580

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SOIL CONTAMINATED WITH OIL AND WATER

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:
Soil contaminated with oil and water; 742 Procurement, Decontamination.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	382.0	0.000	0.000	0.400	382.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio	**ID #: 0000000580**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SOIL CONTAMINATED WITH OIL AND WATER	
Matrix: Soils	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000000584

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: KEROSENE (DIESEL FUEL)/SLUDGE/WATER FROM PUMP TEST

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Kerosene (diesel fuel)/sludge/water from pump UST #3; 741 Procurement, Garage.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.7	1,117.0	0.000	0.000	1.7	1,117.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio ID #: 0000000584

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: KEROSENE (DIESEL FUEL)/SLUDGE/WATER FROM PUMP TEST UST3

Matrix: Organic Sludges/Particulates Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000000587

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: GREASE AND WATER

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Grease and water; 100 Plant 1.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	113.0	0.200	113.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000000587

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: GREASE AND WATER

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation

State: Ohio | ID #: 0000000588

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: MERCO DRY AND OILY MERCO DRY

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Non-recoverable trash for storage or shipment; Plant I, Drum Reconditioning, Drum Baler.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.7	1,599.0	0.000	0.000	1.7	1,599.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio | ID #: 0000000588

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: MERCO DRY AND OILY MERCO DRY

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

State: Ohio | ID #: 0000000594

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SODIUM HYPOSULFIDE - DEVELOPING SOLUTION (CONTAMINATED)

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:
Sodium hyposulfide - developing solution (contaminated); 743 Procurement, Stores-Receiving.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.600	240.0	0.600	240.0	0.000	0.000

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000000594**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SODIUM HYPOSULFIDE - DEVELOPING SOLUTION (CONTAMINATED)

Matrix: Aqueous Liquid **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D011	Conc.	Stabilization

State: Ohio	**ID #: 0000000627**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: 5-GAL CAN W/ SPILL CLEANOUT MATERIAL	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
5-gal can w/ spill cleanout material; 300 Plants 2 & 3, Pilot Plant.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	6.0	0.200	6.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000627**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: 5-GAL CAN W/ SPILL CLEANOUT MATERIAL	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio **ID #: 0000000628**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SPILL CLEAN-UP MATERIALS

Matrix: Heterogeneous Debris **Waste Type: MLLW**

Waste Stream Description and Source:
Spill clean-up materials; 300 Plants 2 & 3, Pilot Plant.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	65.0	0.200	65.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000000628

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SPILL CLEAN-UP MATERIALS

Matrix: Heterogeneous Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000632
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: HYDRAULIC FLUID FROM BALER
Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Hydraulic fluid from baler; 137 Plant 1, Drum Reconditioning, Drum Baler.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.600	318.0	0.000	0.000	0.600	318.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000000632

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: HYDRAULIC FLUID FROM BALER

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000000633

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OIL UNKNOWN GENERATION

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Oil unknown generation; 100 Plant 1.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
2.5	1,292.0	0.000	0.000	2.5	1,292.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000633**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OIL UNKNOWN GENERATION	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000000638

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: USED OIL

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Used oil; 400 Plant 4.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	142.0	0.000	0.000	0.200	142.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000638**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: USED OIL	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000000644

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-RECOVERABLE TRASH, PADS, RAGS, WATER

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Non-recoverable trash, pads, rags, water; 100 Plant 1.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.600	242.0	0.000	0.000	0.600	242.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio **ID #: 0000000644**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-RECOVERABLE TRASH, PADS, RAGS, WATER

Matrix: Heterogeneous Debris **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000000658

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CODED AS OIL - STRONG SOLVENT ODOR

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Coded as oil - strong solvent odor; YAQ.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	40.0	0.000	0.000	0.200	40.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Plan to treat at an existing facility. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio	**ID #: 0000000658**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CODED AS OIL - STRONG SOLVENT ODOR	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000000659

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LEAD AND WOOD SHAVINGS - UNKNOWN ORIGIN

Matrix: Other | Waste Type: MLLW

Waste Stream Description and Source:
Lead and wood shavings - unknown origin; 100 Plant 1.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	9.0	0.200	9.0	0.000	0.000

Treatability Group:
MLLW CH, Other, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000000659**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LEAD AND WOOD SHAVINGS - UNKNOWN ORIGIN

Matrix: Other **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

State: Ohio | ID #: 0000000661

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING # 1594 - FROM NORTHWEST CORNER OF BLDG 12

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:
Boring # 1594 - from northwest corner bldg. 12; ASI.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	216.0	0.200	216.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio | ID #: 0000000661

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING # 1594 - FROM NORTHWEST CORNER OF BLDG 12

Matrix: Soils | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio | ID #: 0000000668

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OIL DRY CONTAMINATED WITH OIL AND WATER FROM BALER

Matrix: Organic Debris | Waste Type: MLLW

Waste Stream Description and Source:

Oil dry contaminated with oil and water from baler; 137 Plant 1, Drum Reconditioning, Drum Baler.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.600	460.0	0.000	0.000	0.600	460.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Debris, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio	**ID #: 0000000668**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OIL DRY CONTAMINATED WITH OIL AND WATER FROM BALER	
Matrix: Organic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

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State: Ohio

ID #: 0000000676

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DRY CELL BATTERIES, BUILDING 12

Matrix: Batteries (lead acid, cadmium)

Waste Type: MLLW

Waste Stream Description and Source:

Dry cell batteries, building 12; 746 Maintenance Section, Machine Shop.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	174.0	0.200	174.0	1.1	909.0

Treatability Group:

MLLW CH, Batteries (lead acid, cadmium), Toxic Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio | ID #: 0000000676

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DRY CELL BATTERIES, BUILDING 12

Matrix: Batteries (lead acid, cadmium) | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002A	Tech.	Deactivation
D006A	Tech.	Thermal Recovery of Metals
D008A	Tech.	Secondary Lead Smelting
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration

State: Ohio	**ID #: 0000000700**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: MAGNESIUM FLAKE AND OILY RAGS	
Matrix: Reactive Metals	**Waste Type: MLLW**

Waste Stream Description and Source:
Magnesium flake and oily rags; 511 Plant 5, Metal Reduction Area Blenders.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	75.0	0.200	75.0	0.000	0.000

Treatability Group:
MLLW CH, Reactive Metals, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000700**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: MAGNESIUM FLAKE AND OILY RAGS	
Matrix: Reactive Metals	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D003E	Tech.	Deactivation

State: Ohio	ID #: 00[illegible]6 4693
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: WASTE OILS	
Matrix: Organic Liquids	Waste Type: MLLW

Waste Stream Description and Source:
Waste oils; 769 Building 45, Boiler Plant Oil Storage.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.600	443.0	0.600	443.0	1.6	1,136.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

General Comments:
The waste characterization basis is a combination of sampling/analysis and process knowledge.

State: Ohio | ID #: 0000000716

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: WASTE OILS

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000000720

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING #1261

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:
Boring #1261; ASI.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	250.0	0.200	250.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000000720

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING #1261

Matrix: Soils | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio | ID #: 0000000743

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAINER OF PUMP OIL AND RAGS

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:
Container of pump oil and rags; 100 Plant 1.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	18.0	0.200	18.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio	**ID #: 0000000743**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAINER OF PUMP OIL AND RAGS	
Matrix: Soils	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio	**ID #: 0000000768**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: DAAP/SOLVENT MIXTURE	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Daap/solvent mixture from storage tanks.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	6.4	6,545.0	6.4	6,545.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000000768**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: DAAP/SOLVENT MIXTURE	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation

State: Ohio | ID #: 0000000776

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING #1674, LOCATED INSIDE PILOT PLT

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:
Boring #1674, located inside pilot plt on northwest side; ASI.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	155.0	0.200	155.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000000776**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING #1674, LOCATED INSIDE PILOT PLT

Matrix: Soils **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio	**ID #: 0000000777**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: AGITENE	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Agitene; 768 Building 45, Boiler Plant.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	268.0	0.400	268.0	5.1	682.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio **ID #: 0000000777**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: AGITENE

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D008B	Conc.	Stabilization
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio ID #: 0000000817

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PAINT CHIPS FROM SAND FILTERS AT WATER PLANT

Matrix: Inorganic Sludges/Particulates Waste Type: MLLW

Waste Stream Description and Source:

MEF 817; PAINT CHIPS FROM SAND FILTERS AT WATER PLANT;768 Building 45, Boiler Plant RCRA

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	177.0	0.200	177.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA. Chemical Treatment - Chemical fixation;

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio ID #: 0000000817

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PAINT CHIPS FROM SAND FILTERS AT WATER PLANT

Matrix: Inorganic Sludges/Particulates Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

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State: Ohio | ID #: 0000000819

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING #1251

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:
Boring #1251; ASI.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	414.0	0.400	414.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

4693

State: Ohio **ID #: 0000000819**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BORING #1251

Matrix: Soils **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio **ID #: 0000000844**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: URANYL NITRATE SOLUTION IN TANKS

Matrix: Aqueous Liquid **Waste Type: MLLW**

Waste Stream Description and Source:
Uranyl or thorium nitrate solution; Plants 2 and 3, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	765.0	1,031,484.0	765.0	1,031,484.0	0.000	0.000

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA. Wastestream is currently undergoing treatment for D002.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

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State: Ohio	**ID #: 0000000844**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: URANYL NITRATE SOLUTION IN TANKS	
Matrix: Aqueous Liquid	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002C	Tech.	Deactivation
D005	Conc.	Chemical Precipitation; or Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization

State: Ohio	**ID #: 0000000870**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: VARNISH - UNUSED	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Varnish - unused; 135 Plant 1, Drum Reconditioning, Drum Painting Booth.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	90.0	0.200	90.0	5.1	455.0

Treatability Group:
MLLW CH, Organic Liquids, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation

State: Ohio	**ID #: 0000000873**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SPENT FIXER	
Matrix: Aqueous Liquid	**Waste Type: MLLW**

Waste Stream Description and Source:
Spent fixer; 730 Laboratory.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.2	612.0	1.2	612.0	4.6	2,273.0

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D011	Conc.	Stabilization

State: Ohio	**ID #: 0000001080**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CADMIUM SPRINGS	
Matrix: Inorganic Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Cadmium springs; 927.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	26.0	0.200	26.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000001080**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CADMIUM SPRINGS	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000001178

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: GROUNDWATER FROM WELL #2649

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:
Groundwater fron well #2649; RGW.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.600	460.0	0.000	0.000	0.600	460.0	0.000	0.000

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000001178**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: GROUNDWATER FROM WELL #2649

Matrix: Aqueous Liquid **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization
F002	Conc.	Incineration

State: Ohio	**ID #: 0000001180**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: GROUNDWATER FROM WELL # 1031	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Groundwater from well # 1031; RGW.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	46.0	0.000	0.000	0.200	46.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000001180**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: GROUNDWATER FROM WELL # 1031

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

State: Ohio | ID #: 0000001182

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CLEAR DISPERSANT,TYPE (H)

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Clear dispersant type (h) premix-black, cyan, yellow & magenta; 735 Service Bldg. and Admin. Bldg.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.000	89.0	1.000	89.0	5.2	455.0

Treatability Group:
MLLW CH, Organic Liquids, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation

State: Ohio	**ID #: 0000001185**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: TYPE 028 FIX; CD-5 DEVELOPER	
Matrix: Aqueous Liquid	**Waste Type: MLLW**

Waste Stream Description and Source:
Type 028 fix; cd-5 developer; 735 Service Bldg. and Admin. Bldg.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	229.0	0.200	229.0	1.1	1,136.0

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D011	Conc.	Stabilization

State: Ohio | ID #: 0000001199

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: MERCURY CONTAMINATED FLOOR TILE & PIPE INSULATION

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Mercury contaminated floor tile & pipe insulation; 730 Laboratory.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
3.5	1,111.0	0.000	0.000	3.5	1,111.0	3.6	1,136.0

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration

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State: Ohio | ID #: 0000001199

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: MERCURY CONTAMINATED FLOOR TILE & PIPE INSULATION

Matrix: Inorganic Debris | Waste Type: MLLW

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 0000001229**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED SUMP WATER	
Matrix: Aqueous Liquid	**Waste Type: MLLW**

Waste Stream Description and Source:
Contaminated sump water; 300 Plants 2 & 3, Pilot Plant.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	3.5	3,107.0	3.5	3,107.0	18.1	15,909.0

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio | ID #: 0000001229

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SUMP WATER

Matrix: Aqueous Liquid | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
D019		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration
F003	Conc.	Incineration

State: Ohio | ID #: 0000001271

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LEAD SOLDER JOINTS

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Lead solder joints; 730 Laboratory.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	7.7	6,676.0	7.7	6,676.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

State: Ohio	**ID #: 0000001271**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: LEAD SOLDER JOINTS	
Matrix: Inorganic Debris	**Waste Type: MLLW**

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 0000001297**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: PC 49896 ITEK UNIVERSAL DEVELOPER	
Matrix: Aqueous Liquid	**Waste Type: MLLW**

Waste Stream Description and Source:
PC 49896 Itek universal developer.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	5.7	509.0	5.7	509.0	0.000	0.000

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D011	Conc.	Stabilization

State: Ohio | ID #: 0000001337

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED WATER NON CHLORIDE

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated water non chloride; 765 Building 45, Water Treatment.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	170.0	0.200	170.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation

State: Ohio | ID #: 0000001412

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED ORGANIC CHEMICAL OR

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

Contaminated organic chemical or solvent; 768 Building 45, Boiler Plant.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.208	188.0	0.208	188.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio | ID #: 0000001412

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINMATED ORGANIC CHEMICAL OR

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio | ID #: 0000001427

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON RECOVERABLE TRASH

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Non recoverable trash; 655 Plant 6, Water Treatment Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	41.0	0.000	0.000	0.200	41.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio	**ID #: 0000001427**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON RECOVERABLE TRASH	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000001432

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON CHLORIDE CONTAMINATED WATER OR SUMP

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Non chloride contaminated water or sump liquor; 100 Plant 1.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.0	671.0	1.0	671.0	5.3	3409.0

Treatability Group:
MLLW CH, Organic Liquids, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation

4693

State: Ohio **ID #: 0000001501**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SPILL CLEANUPS OF OIL AND GAS

Matrix: Inorganic Debris **Waste Type: MLLW**

Waste Stream Description and Source:
Spill cleanups of oil and gas from gasoline engines; 700 Waste Management.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.000	230.0	0.000	0.000	1.000	230.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio	**ID #: 0000001501**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SPILL CLEANUPS OF OIL AND GAS FROM	
Matrix: Inorganic Debris	**Waste Type: MLLW**

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000001532

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BIODENITRIFICATION SURGE LAGOON SLUDGE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Biodenitrification surge lagoon sludge; 721 Waste Management, Chemical Pits.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	423.0	386,391.0	423.0	386,391.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000001532**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: BIODENITRIFICATION SURGE LAGOON SLUDGE

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F002	Conc.	Incineration

4693

State: Ohio	**ID #: 0000001536**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: RAINWATER FROM WASTE PIT AREA	
Matrix: Aqueous Liquid	**Waste Type: MLLW**

Waste Stream Description and Source:
Rainwater from waste pit area; 721 Waste Management, Chemical Pits.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	32.4	30,113.0	32.4	30,113.0	0.000	0.000

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

4693

State: Ohio **ID #: 0000001536**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: RAINWATER FROM WASTE PIT AREA

Matrix: Aqueous Liquid **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio | ID #: 0000001537

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: FILTER MATERIAL - SAND, GRAVEL, FLYASH

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Filter material - sand, gravel, flyash; 721 Waste Management, Chemical Pits.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	239.2	186,537.0	239.2	186,537.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio

ID #: 0000[illegible]693

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: FILTER MATERIAL - SAND, GRAVEL, FLYASH

Matrix: Inorganic Debris

Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000001691

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: HYDROFLUORIC ACID

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:
Hydrofluoric acid.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
16.7	80,818.0	0.000	0.000	16.7	80,818.0	0.000	0.000

Treatability Group:
MLLW CH, Aqueous Liquid

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000001691**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: HYDROFLUORIC ACID

Matrix: Aqueous Liquid **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002A	Tech.	Deactivation
U134	Tech.	Adsorption followed by Neutralization; or Neutralization

4693

State: Ohio | ID #: 0000001692

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NITRIC ACID

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:
Nitric acid.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	145.0	0.400	145.0	0.000	0.000

Treatability Group:
MLLW CH, Aqueous Liquid, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000001692**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NITRIC ACID	
Matrix: Aqueous Liquid	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002A	Tech.	Deactivation

State: Ohio	**ID #: 0000001706**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: LAB WASTE, TCLP EXTRACT	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Samples, non-metallic, miscellaneous; CNL.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.4	1,466.0	1.4	1,466.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio | ID #: 0000001706

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LAB WASTE, TCLP EXTRACT

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio | ID #: 0000001707

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LAB GENERATED WASTE, ACID DIGTSTATES

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:
Samples, non-metallic, miscellaneous; CNL.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.3	1,317.0	0.000	0.000	1.3	1,317.0	0.000	0.000

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio | ID #: 0000001707

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LAB GENERATED WASTE, ACID DIGTSTATES

Matrix: Aqueous Liquid | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002C	Tech.	Deactivation
D007	Conc.	Chemical Reduction followed by Stabilization
D008A	Tech.	Secondary Lead Smelting
D019		Not currently prohibited under the LDR Program.
D028		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio **ID #: 0000001708**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LAB GENERATED WASTE, METHYLENE CHLORIDE EXTRACTS

Matrix: Organic Liquids **Waste Type: MLLW**

Waste Stream Description and Source:
Samples, non-metallic, miscellaneous; CNL.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	58.0	0.000	0.000	0.200	58.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activites are being conducted according to good operating practices.

State: Ohio ID #: 0000001708

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LAB GENERATED WASTE, METHYLENE CHLORIDE EXTRACTS

Matrix: Organic Liquids Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

State: Ohio | ID #: 0000001709

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LAB GENERATED WASTE FLAMMABLE ORGANIC EXTRACTS

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Samples, non-metallic, miscellaneous; CNL.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	161.9	0.000	0.000	0.200	161.9	1.000	455.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio **ID #: 0000001709**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LAB GENERATED WASTE FLAMMABLE ORGANIC EXTRACTS

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D002A	Tech.	Deactivation
F003	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio | ID #: 0000001716

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LAB GENERATED WASTE, CONTACT WASTE SOLID

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Samples, non-metallic, miscellaneous; CNL.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	397.3	0.000	0.000	0.400	397.3	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio	**ID #: 0000001716**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: LAB GENERATED WASTE, CONTACT WASTE SOLID	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration
F002	Conc.	Incineration
F005A	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

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State: Ohio	**ID #: 0000001725**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: LUBRICATING OILS	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Lubricating oils; 739 Service Bldg. and Admin. Bldg., Garage Oil.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.600	468.0	0.000	0.000	0.600	468.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio	**ID #: 0000001725**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: LUBRICATING OILS	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000001751

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SPENT FIXER

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:
Spent fixer.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.600	57.0	0.600	57.0	0.000	0.000

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio | ID #: 0000001751

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SPENT FIXER

Matrix: Aqueous Liquid | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D011	Conc.	Stabilization

State: Ohio | ID #: 0000001841

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SOIL

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:
Soil with Organics and Inorganics.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.2	1,514.0	1.2	1,514.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio
ID #: 0000001841
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: SOIL
Matrix: Soils
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration
F002	Conc.	Incineration

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State: Ohio | ID #: 0000001842

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: GRASS ON THE SOIL

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:
Grass on the soil.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	19.0	0.200	19.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio | ID #: 0000001842

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: GRASS ON THE SOIL

Matrix: Soils | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio	ID #: 0000001987
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: LEAD/LEAD SEALS	
Matrix: Elemental Lead	Waste Type: MLLW

Waste Stream Description and Source:
Lead/lead seals; 700 Waste Management.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.019	8.0	0.019	8.0	0.000	0.000

Treatability Group:
MLLW CH, Elemental Lead, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio	**ID #: 0000001987**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: LEAD/LEAD SEALS	
Matrix: Elemental Lead	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

State: Ohio | ID #: 0000001998

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: METHANOL AND CYCLOHEXANE

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Methanol and cyclohexane from 732 Laboratory General, Analytical.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.380	34.0	0.380	34.0	0.285	227.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio | ID #: 0000001998

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: METHANOL AND CYCLOHEXANE

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
F003	Conc.	Incineration

State: Ohio | ID #: 0000010002

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP SALTS

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Scrap salts; FTA RMI Company, Inc..

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
6.9	7,683.0	0.000	0.000	6.9	7,683.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000010002

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP SALTS

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization
D008C	Tech.	Macroencapsulation

State: Ohio | ID #: 0000010003

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY OXIDATION SLUDGES

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Oily oxidation sludges with high free metal; 800 Plant 8, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	2.9	2,593.0	2.9	2,593.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000010003

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY OXIDATION SLUDGES WITH HIGH FREE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D039		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

State: Ohio | ID #: 0000010004

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SOLVENT

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

Contaminated solvent - trichlor, perchlor; 735 Service Building and Admin. Building.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	4.6	3,483.0	4.6	3,483.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000010004

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SOLVENT - TRICHLOR,

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization
D018		Not currently prohibited under the LDR Program.
D019		Not currently prohibited under the LDR Program.
D021		Not currently prohibited under the LDR Program.
D029		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

State: Ohio | ID #: 0000010005

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SOIL, ROCKS, BRICKS AND CERAMICS

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated soil, rocks, bricks, and ceramics; 700 Waste Management.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.7	2,393.0	0.000	0.000	1.7	2,393.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000010005**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SOIL, ROCKS, BRICKS AND CERAMICS

Matrix: Inorganic Debris **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010006
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: CONTAMINATED OIL - INSOLUBLE
Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated oil - insoluble; 730 Laboratory General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	122.0	0.200	122.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000010006

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED OIL - INSOLUBLE

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008C	Tech.	Macroencapsulation
D009A	Tech.	Incineration; or Mercury Roast/Retort
D039		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

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State: Ohio | ID #: 0000010007

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY SLUDGES

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Oily sludges; 965 Plant 9, Sump Liquor Processing.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.600	430.0	0.600	430.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000010007**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY SLUDGES	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization
F001	Conc.	Incineration

State: Ohio	**ID #: 0000010009**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SLUDGES - SOLVENT (TRICHLOR, PERCHLOR,	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

Waste Stream Description and Source:
Sludges - solvent (trichlor, perchlor, etc.); 135 Plant 1, Drum Reconditioning, Drum Painting Booth.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	133.0	0.400	133.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000010009

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SLUDGES - SOLVENT (TRICHLOR, PERCHLOR,

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D008C	Tech.	Macroencapsulation
D035		Not currently prohibited under the LDR Program.
F005A	Conc.	Incineration

4693

State: Ohio | ID #: 0000010010

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SLUDGES, OILY

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Sludges, oily; 655 Plant 6, Water Treatment Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
36.2	25,911.0	73.4	51,860.0	109.6	77,771.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000010010

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SLUDGES, OILY

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D029		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

4693

State: Ohio	**ID #: 0000010011**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED BURNABLES	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Contaminated burnables; Building 362.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	51.0	0.000	0.000	0.200	51.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000010011**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED BURNABLES	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 0000010012**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED BURNABLES	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Contaminated burnables; 200 Plants 2 & 3, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	6.0	2,649.0	6.0	2,649.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000010012**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED BURNABLES	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D029		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010013

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SUMP CAKE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Sump cake; Building 362.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
5.0	6,556.0	0.000	0.000	5.0	6,556.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000010013**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SUMP CAKE	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization

State: Ohio | ID #: 0000010014

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: U-CONTAMINATED WATER

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:
U-contaminated water; 200 Plants 2 & 3, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
3.0	2,644.0	0.000	0.000	3.0	2,644.0	0.000	0.000

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio
ID #: 0000010014
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: U-CONTAMINATED WATER
Matrix: Aqueous Liquid
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D039		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000010016

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY SLUDGE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Oily sludge; 351.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.2	1,353.0	1.2	1,353.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000010016

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY SLUDGE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D010	Conc.	Stabilization
D035		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

4693

State: Ohio | ID #: 0000010017

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LINERS/GLOVES CONTAM. WITH ROOFING CPD

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Liners/gloves contaminated with roofing CPD and diesel fuel; 745 Maintenance Section.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.600	77.0	0.000	0.000	0.600	77.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000010017

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: LINERS/GLOVES CONTAM. WITH ROOFING CPD

Matrix: Inorganic Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization
D010	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010018

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SOIL AND ROCKS

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated soil and rocks; 500.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.600	843.0	0.000	0.000	0.600	843.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000010018

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SOIL AND ROCKS

Matrix: Inorganic Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008C	Tech.	Macroencapsulation
D009B	Tech.	Mercury Roast/Retort

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010021

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SLUDGES, OILY

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Sludges, oily; 200 Plants 2 & 3, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	311.0	0.400	311.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000010021**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SLUDGES, OILY

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008C	Tech.	Macroencapsulation
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

State: Ohio | ID #: 0000010022

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: GRIT BLAST

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Grit blast; 700 Waste Management.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
179.7	284,951.0	0.000	0.000	179.7	284,951.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000010022**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: GRIT BLAST	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008C	Tech.	Macroencapsulation

State: Ohio	**ID #: 0000010023**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-RECOVERABLE TRASH	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Non-recoverable trash; 200 Plants 2 & 3, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	4.0	3,047.0	4.0	3,047.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000010023

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-RECOVERABLE TRASH

Matrix: Heterogeneous Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008C	Tech.	Macroencapsulation
F001	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010024

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: TRASH CONT. TO SOLVENT

Matrix: Organic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Trash Cont. to solvent; 741 Procurement, Garage.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	100.0	0.400	100.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000010024**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: TRASH CONT. TO SOLVENT	
Matrix: Organic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

4693

State: Ohio	**ID #: 0000010025**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED SOIL AND ROCKS	
Matrix: Inorganic Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Contaminated soil and rocks; FTA RMI Company, Inc..

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
30.6	34,450.0	0.000	0.000	30.6	34,450.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio	**ID #: 0000010025**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED SOIL AND ROCKS	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010026

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: 1,1,1-TRICHLOROETHANE STILL BOTTOMS

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

1,1,1-Trichloroethane still bottoms; YAQ.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	9.6	7,792.0	9.6	7,792.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000010026**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: 1,1,1-TRICHLOROETHANE STILL BOTTOMS

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
F001	Conc.	Incineration

693

State: Ohio	ID #: 0000010027
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED OIL, INSOLUBLE	
Matrix: Organic Liquids	Waste Type: MLLW

Waste Stream Description and Source:
Contaminated oil, insoluble; 600 Plant 6, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	2.9	2,507.0	2.9	2,507.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

297

State: Ohio
ID #: 0000010027
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: CONTAMINATED OIL, INSOLUBLE
Matrix: Organic Liquids
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

4693

State: Ohio	ID #: 0000010028
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SLUDGES, OILY	
Matrix: Organic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:
Sludges, oily; 800 Plant 8, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	2.1	1,478.0	2.1	1,478.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000010028**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SLUDGES, OILY	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008C	Tech.	Macroencapsulation
F001	Conc.	Incineration

4693

State: Ohio | ID #: 0000010029

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED INSOLUBLE OIL

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

Contaminated insoluble oil; 921 Plant 9, Casting, N-R Furnace.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.7	1,389.0	1.7	1,389.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000010029

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED INSOLUBLE OIL

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008C	Tech.	Macroencapsulation
D019		Not currently prohibited under the LDR Program.
D029		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

State: Ohio **ID #: 0000010030**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SOLVENTS (METHANOL)

Matrix: Organic Liquids **Waste Type: MLLW**

Waste Stream Description and Source:
Contaminated solvents (methanol); 732 Laboratory General, Analytical.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.600	82.0	0.600	82.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000010030**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED SOLVENTS (METHANOL)	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
F003	Conc.	Incineration

State: Ohio	ID #: 0000010031
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: FLOOR SUMP CLEANOUT SLUDGE	
Matrix: Organic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:
Floor sump cleanout sludge; 738 Service Bldg. and Admin. Bldg., Garage RCRA.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.600	595.0	0.600	595.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio
ID #: 0000010031
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: FLOOR SUMP CLEANOUT SLUDGE
Matrix: Organic Sludges/Particulates
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D029		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

46693

State: Ohio	**ID #: 0000010032**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED OIL, INSOLUBLE	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Contaminated oil, insoluble; 901 Plant 9, General, Plant 9 Maintenance.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	123.0	0.200	154.0	0.400	277.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio
ID #: 0000010032
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: CONTAMINATED OIL, INSOLUBLE
Matrix: Organic Liquids
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio	ID #: 0000010034
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: BENZENE (LABPACKED)	
Matrix: Lab Packs without Metals	Waste Type: MLLW

Waste Stream Description and Source:
Benzene (labpacked); 732 Laboratory General, Analytical.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	3.0	0.000	0.000	0.200	3.0	0.000	0.000

Treatability Group:
MLLW CH, Lab Packs without Metals, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000010034**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: BENZENE (LABPACKED)	
Matrix: Lab Packs without Metals	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D018		Not currently prohibited under the LDR Program.
U019	Conc.	Incineration

The alternate LDR treatment standards for labpacks is incineration as a method of treatment and a requirement for the incinerator residues to meet the treatment standards for the TC toxic metals (i.e., D004-D008, and D010-D011).

State: Ohio | ID #: 0000010035

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CARBON TETRACHLORIDE (LABPACKED)

Matrix: Lab Packs without Metals | Waste Type: MLLW

Waste Stream Description and Source:
Carbon tetrachloride (labpacked); 732 Laboratory General, Analytical

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	20.0	0.000	0.000	0.200	20.0	0.000	0.000

Treatability Group:
MLLW CH, Lab Packs without Metals, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000010035**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CARBON TETRACHLORIDE (LABPACKED)	
Matrix: Lab Packs without Metals	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D019		Not currently prohibited under the LDR Program.
U211	Conc.	Incineration

The alternate LDR treatment standards for labpacks is incineration as a method of treatment and a requirement for the incinerator residues to meet the treatment standards for the TC toxic metals (i.e., D004-D008, and D010-D011).

State: Ohio | ID #: 0000020003

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DEGREASING SOLVENT

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Degreasing solvent from YAQ.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
21.9	21,468.0	36.3	35,432.0	58.2	56,900.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000020003**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DEGREASING SOLVENT

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D019		Not currently prohibited under the LDR Program.
D022		Not currently prohibited under the LDR Program.
D028		Not currently prohibited under the LDR Program.
D029		Not currently prohibited under the LDR Program.
D035		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F003	Conc.	Incineration

State: Ohio | ID #: 0000020006

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OIL CONTAMINATED WET SUMP OR FILTER CAKE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Oil contaminated wet sump or filter cake from VXB.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	26.4	16,417.0	26.4	16,417.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000020006**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OIL CONTAMINATED WET SUMP OR FILTER CAKE	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

State: Ohio	ID #: 0000020007
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OIL CONTAMINATED WET SUMP OR FILTER CAKE	
Matrix: Organic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:
Oil contaminated wet sump or filter cake from HXA United Nuclear Corp., Hanford, WA.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
64.7	31,763.0	0.000	0.000	64.7	31,763.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio
ID #: 0000020007
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: OIL CONTAMINATED WET SUMP OR FILTER CAKE
Matrix: Organic Sludges/Particulates
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D011	Conc.	Stabilization

State: Ohio | ID #: 0000020015

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP SALTS AND FLOOR SWEEPINGS

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Scrap salts and floor sweepings - low fluoride from 643 Plant 6, Heat Treating, NU Sal Furnace

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
4.6	2,643.0	0.400	223.0	5.0	2,866.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000020015**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SCRAP SALTS AND FLOOR SWEEPINGS - LOW	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

State: Ohio | ID #: 0000020021

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED INSOLUBLE OIL

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated insoluble oil;137 Plant 1, Drum Reconditioning, Drum Baler.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	3.1	2,640.0	3.1	2,640.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000020021

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED INSOLUBLE OIL

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D019		Not currently prohibited under the LDR Program.
D029		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

4693

State: Ohio	**ID #: 0000020024**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SCRAP SALTS AND FLOOR SWEEPINGS	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

Waste Stream Description and Source:
Scrap salts and floor sweepings - high fluoride from FYC Paducah Plant.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.9	1,015.0	0.000	0.000	1.9	1,015.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000020024**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SCRAP SALTS AND FLOOR SWEEPINGS - HIGH	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization
D008C	Tech.	Macroencapsulation

4693

State: Ohio | ID #: 0000020027

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DUST COLLECTOR RESIDUES - HIGH FLUORIDE

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:

Dust collector residues - high fluoride from 732 Laboratory General, Analytical.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	229.0	0.200	16.0	0.400	245.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000020027**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DUST COLLECTOR RESIDUES - HIGH FLUORIDE

Matrix: Inorganic Debris **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D011	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

4693

State: Ohio	ID #: 0000020028
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED OIL - INSOLUBLE	
Matrix: Organic Liquids	Waste Type: MLLW

Waste Stream Description and Source:
Contaminated oil - insoluble from 351.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	10.0	2,743.0	10.0	2,743.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000020028**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED OIL - INSOLUBLE	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

State: Ohio | ID #: 0000020031

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED OIL, INSOLUBLE GEAR OIL,

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated oil, insoluble gear oil, lubricating oil from 100 Plant 1, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.9	1,264.0	1.9	1,264.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000020031

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED OIL, INSOLUBLE GEAR OIL,

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
D019		Not currently prohibited under the LDR Program.
D028		Not currently prohibited under the LDR Program.
D029		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

State: Ohio | ID #: 0000020033

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PROCESS RESIDUES, TRAILER CAKES.

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Process residues, trailer cakes, slurries, raffinates from 620 Plant 6, Machining.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.000	384.0	0.000	0.000	1.000	384.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000020033

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PROCESS RESIDUES, TRAILER CAKES.

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

4693

State: Ohio **ID #: 0000020035**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DUST COLLECTOR RESIDUES - HIGH FLUORIDE

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

Waste Stream Description and Source:

Dust collector residues - high fluoride from 332 Plants 2 & 3, Green Salt Production, Spencer Vacuum.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.800	560.0	0.000	0.000	0.800	560.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000020035**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DUST COLLECTOR RESIDUES - HIGH FLUORIDE

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

4693

State: Ohio **ID #: 0000020036**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP SALTS AND FLOOR SWEEPINGS

Matrix: Inorganic Debris **Waste Type: MLLW**

Waste Stream Description and Source:

Scrap salts and floor sweepings - low fluoride from 660 Plant 6, Degreasing and Pickling.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.800	388.0	0.800	388.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Debris, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000020036**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SCRAP SALTS AND FLOOR SWEEPINGS - LOW	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000020037

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PROCESS RESIDUES, TRAILER CAKES,

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Process residues, trailer cakes, slurries, raffinates from 900 Plant 9, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.600	363.0	0.000	0.000	0.600	363.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000020037

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PROCESS RESIDUES, TRAILER CAKES,

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D029		Not currently prohibited under the LDR Program.

4693

State: Ohio | ID #: 0000020038

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED OIL - INSOLUBLE

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

Contaminated oil - insoluble from 301 Plants 2 & 3, Pilot Plant General, Pilot Plant Maintenance.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	288.0	0.400	288.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000020038

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED OIL - INSOLUBLE

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
D019		Not currently prohibited under the LDR Program.
D028		Not currently prohibited under the LDR Program.
D029		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio | ID #: 0000020045

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED TBP AND/OR KEROSENE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Contaminated TBP and/or kerosene mixtures and sludges from 732 Laboratory General, Analytical.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	50.0	0.200	50.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000020045**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED TBP AND/OR KEROSENE

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D019		Not currently prohibited under the LDR Program.
D022		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

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State: Ohio | ID #: 0000020046

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-METALLIC MISCELLANEOUS SAMPLES

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:

Non-metallic miscellaneous samples from 731 Laboratory General, Operations & Engineering Services.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	35.0	0.000	0.000	0.400	35.0	0.000	0.000

Treatability Group:

MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000020046**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-METALLIC MISCELLANEOUS SAMPLES	
Matrix: Aqueous Liquid	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

State: Ohio | ID #: 0000020047

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP SALTS AND FLOOR SWEEPINGS - LOW

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Scrap salts and floor sweepings - low fluoride from 610 Plant 6, Rolling.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	230.0	0.000	0.000	0.400	230.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000020047**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP SALTS AND FLOOR SWEEPINGS - LOW

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D008C	Tech.	Macroencapsulation

State: Ohio | ID #: 0000020048

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PROCESS RESIDUES, TRAILER CAKES.

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Process residues, trailer cakes, slurries, raffinates, from 731 Laboratory General, Operations & Engineering Services.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	9.0	0.000	0.000	0.200	9.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000020048

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PROCESS RESIDUES, TRAILER CAKES.

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F005A	Conc.	Incineration

State: Ohio	ID #: 0000020054
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED SOLVENT - TRICHLOR, PERCHLR	
Matrix: Organic Liquids	Waste Type: MLLW

Waste Stream Description and Source:
Contaminated solvent - trichlor, perchlor from 530 Plant 5, Casting Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	171.0	0.000	0.000	0.200	171.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000020054
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: CONTAMINATED SOLVENT - TRICHLOR, PERCHLR
Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D019		Not currently prohibited under the LDR Program.
D022		Not currently prohibited under the LDR Program.
D028		Not currently prohibited under the LDR Program.
D029		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F005A	Conc.	Incineration

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State: Ohio | ID #: 0000020055

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED OIL - INSOLUBLE

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

Contaminated oil - insoluble from 300 Plants 2 & 3, Pilot Plant General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	188.0	0.200	188.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000020055**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED OIL - INSOLUBLE	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D029		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

State: Ohio | ID #: 0000020058

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DUST COLLECTOR RESIDUES - HIGH FLUORIDE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Dust collector residues - high fluoride from 101 Plant 1, General, Maintenance.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	3.0	0.000	0.000	0.200	3.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000020058

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DUST COLLECTOR RESIDUES - HIGH FLUORIDE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization

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State: Ohio | ID #: 0000020094

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED BURNABLES, RAGS, FILTER

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:

Contaminated burnables, rags, filter, cloth from 310 Plants 2 & 3, Green Salt Production.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.7	395.0	0.000	0.000	1.7	395.0	0.000	0.000

Treatability Group:

MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000020094

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED BURNABLES, RAGS, FILTER

Matrix: Heterogeneous Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D011	Conc.	Stabilization
F001	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000020095

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED BURNABLES - RAGS, PAPER

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:

Contaminated burnables - rags, paper, polyethylene; HXA United Nuclear Corp., Hanford, WA.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.800	120.0	0.400	167.0	1.2	287.0	2.0	455.0

Treatability Group:

MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio **ID #: 0000020095**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED BURNABLES - RAGS, PAPER

Matrix: Heterogeneous Debris **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D011	Conc.	Stabilization
F001	Conc.	Incineration
F005A	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

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State: Ohio	ID #: 0000020107
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED NON-BURNABLES	
Matrix: Heterogeneous Debris	Waste Type: MLLW

Waste Stream Description and Source:
Contaminated non-burnables; 600 Plant 6, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	273.0	0.000	0.000	0.200	273.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000020107

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED NON-BURNABLES

Matrix: Heterogeneous Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	ID #: 0000020114
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED BURNABLES	
Matrix: Heterogeneous Debris	Waste Type: MLLW

Waste Stream Description and Source:
Contaminated burnables; 620 Plant 6, Machining.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	185.0	0.000	0.000	0.400	185.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000020114**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED BURNABLES	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000020120

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DUST COLLECTOR BAGS

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Dust collector bags; 900 Plant 9, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	190.0	0.000	0.000	0.400	190.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000020120**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: DUST COLLECTOR BAGS	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

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State: Ohio	ID #: 0000020139
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SAMPLES, NON-METALLIC	
Matrix: Inorganic Debris	Waste Type: MLLW

Waste Stream Description and Source:
Samples, non metallic; FTA RMI Company, Inc.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	84.0	0.200	84.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000020139**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SAMPLES, NON-METALLIC	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	ID #: 0000020142
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED TBP-KEROSENE	
Matrix: Organic Liquids	Waste Type: MLLW

Waste Stream Description and Source:
Contaminated TBP-kerosene; 732 Laboratory General, Analytical.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	15.0	0.400	15.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000020142

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED TBP-KEROSENE

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D019		Not currently prohibited under the LDR Program.
D022		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration
F003	Conc.	Incineration

State: Ohio | ID #: 0000020145

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: WET SUMP OR FILTER CAKE, OIL

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Wet sump or filter cake, oil contaminated; HXA United Nuclear Corp., Hanford, WA.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	271.0	0.400	271.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000020145

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: WET SUMP OR FILTER CAKE, OIL

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002A	Tech.	Deactivation
D007	Conc.	Chemical Reduction followed by Stabilization

State: Ohio | ID #: 0000020151

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED BRICKS, SOIL, ROCKS, SAND

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated bricks, soil, rocks, sand, etc.; 530 Plant 5, Casting Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.600	466.0	0.000	0.000	0.600	466.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000020151**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED BRICKS, SOIL, ROCKS, SAND	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D008B	Conc.	Stabilization
D011	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

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State: Ohio	ID #: 0000030004
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: INCINERATOR CINDERS	
Matrix: Inorganic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:
Incinerator cinders; 240 Plants 2 & 3, Hot Raffinate Bldg., Trash Baler.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
112.3	66,404.0	0.000	0.000	112.3	66,404.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000030004

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: INCINERATOR CINDERS

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

4693

State: Ohio | ID #: 0000030005

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY SLUDGES

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Oily sludges; 853 Plant 8, Oxidation System, Oil Decantation.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	16.4	15,563.0	16.4	15,563.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000030005**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY SLUDGES

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D019	-	Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F003	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio | ID #: 0000030009

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP SALTS AND FLOOR SWEEPINGS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Scrap salts and floor sweepings - high fluoride; 100 Plant 1, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
10.4	7,532.0	0.000	0.000	10.4	7,532.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000030009**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SCRAP SALTS AND FLOOR SWEEPINGS - HIGH	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000030010

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: WET SUMP OR FILTER CAKE - OIL

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Wet sump or filter cake - oil contaminated; 735 Service Bldg. and Admin. Bldg.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
7.5	7,554.0	3.5	3,070.0	11.0	10,624.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000030010

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: WET SUMP OR FILTER CAKE - OIL

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

State: Ohio | ID #: 0000030018

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: WET SUMP OR FILTER CAKE - NON-OILY

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Wet sump or filter cake - non oily, non halide; 381 Plants 2 & 3, Pilot Plant Sump, Sump Catch Basin.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	4.4	3,235.0	4.4	3,235.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000030018**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: WET SUMP OR FILTER CAKE - NON-OILY	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D039		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

State: Ohio **ID #: 0000030026**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-OILY CLEANOUT SLUDGES FOR ROASTING

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

Waste Stream Description and Source:
Non-oily cleanout sludges for roasting; 200 Plants 2 & 3, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	5.4	3,972.0	5.4	3,972.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000030026**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-OILY CLEANOUT SLUDGES FOR ROASTING	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D039		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

State: Ohio | ID #: 0000030027

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SOIL, ROCKS, BRICKS

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:

Contaminated soil, rocks, bricks and ceramics; 212 Plants 2 & 3, Digestion, North Side Digestors.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.9	2,870.0	0.000	0.000	1.9	2,870.0	0.000	0.000

Treatability Group:

MLLW CH, Soils, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio ID #: 0000030027

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SOIL, ROCKS, BRICKS AND

Matrix: Soils Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D010	Conc.	Stabilization
D011	Conc.	Stabilization

4693

State: Ohio	ID #: 0000030033
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED SOLVENT - TRICHLOR, PERCHLR	
Matrix: Organic Liquids	Waste Type: MLLW

Waste Stream Description and Source:
Contaminated solvent - trichlor, perchlor; 745 Maintenance Section.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	3.5	2,547.0	3.5	2,547.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000030033**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SOLVENT - TRICHLOR, PERCHLR

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D039		Not currently prohibited under the LDR Program.
F003	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio | ID #: 0000030034

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OIL CONTAMINATED WITH SOLVENTS (TANK 5)

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Oil contaminated with solvents (tank 5); 741 Procurement, Garage.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	282.0	17.2	12,199.0	17.6	12,481.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000030034

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OIL CONTAMINATED WITH SOLVENTS (TANK 5)

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

State: Ohio | ID #: 0000030036
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: DUST COLLECTOR RESIDUES - HIGH FLUORIDE
Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Dust collector residues - high fluoride; 665 Plant 6, Inspection.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.000	551.0	0.000	0.000	1.000	551.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000030036

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DUST COLLECTOR RESIDUES - HIGH FLUORIDE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization

4693

State: Ohio **ID #: 0000030037**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PROCESS RESIDUES, TRAILER CAKES,

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

Waste Stream Description and Source:

Process residues, trailer cakes, slurries, raffinates; 381 Plants 2 & 3, Pilot Plant Sump, Sump Catch Basin.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.800	455.0	0.000	0.000	0.800	455.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000030037**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: PROCESS RESIDUES, TRAILER CAKES,	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D039		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

4693

State: Ohio	ID #: 0000030039
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED ROCKS, SOIL, ETC., WITH NO	
Matrix: Inorganic Debris	Waste Type: MLLW

Waste Stream Description and Source:
Contaminated rocks, soil, etc., with no free liquids; 211 Plants 2 & 3, Digestion, South Side Digestors.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.600	450.0	0.000	0.000	0.600	450.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000030039

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED ROCKS, SOIL, ETC., WITH NO

Matrix: Inorganic Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D011	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000030042

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: WET SUMP OR FILTER CAKE - NON-OILY,

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Wet sump or filter cake - non-oily, non-halide; 380 Plants 2 & 3, Pilot Plant Sump.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.800	593.0	0.800	593.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000030042

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: WET SUMP OR FILTER CAKE - NON-OILY,

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D039		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

State: Ohio | ID #: 0000030045

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY SLUDGES, HIGH FREE METAL

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Oily sludges, high free metal; 655 Plant 6, Water Treatment Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.600	423.0	0.000	0.000	0.600	423.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000030045**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY SLUDGES, HIGH FREE METAL	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration

State: Ohio | ID #: 0000030046

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-OILY CLEANOUT SLUDGES FOR ROASTING

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Non-oily cleanout sludges for roasting; 741 Procurement, Garage.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	2.1	1,866.0	2.1	1,866.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000030046**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-OILY CLEANOUT SLUDGES FOR ROASTING	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D019		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

State: Ohio | ID #: 0000030047

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SOLVENT SLUDGE, TRICHLOR, PERCHLOR, ETC.

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Solvent sludge, trichlor, perchlor, etc., from 732 Laboratory General, Analytical.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.000	79.0	0.000	0.000	1.000	79.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000030047**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SOLVENT SLUDGE, TRICHLOR, PERCHLOR, ETC.

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization
D011	Conc.	Stabilization

State: Ohio	**ID #: 0000030051**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-METALLIC MISCELLANEOUS SAMPLES	
Matrix: Inorganic Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Non-metallic miscellaneous samples; 140 Plant 1, Sampling.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	20.0	0.000	0.000	0.200	20.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000030051**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-METALLIC MISCELLANEOUS SAMPLES

Matrix: Inorganic Debris **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001E	Tech.	Deactivation
D003D	Tech.	Deactivation

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000030053

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PROCESS RESIDUES, TRAILER CAKES,

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Process residues, trailer cakes, slurries, raffinates; 660 Plant 6, Degreasing and Pickling.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	78.0	0.200	78.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000030053

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PROCESS RESIDUES, TRAILER CAKES,

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio | ID #: 0000030060

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: WET SUMP OR FILTER CAKE - NON-OILY,

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Wet sump or filter cake - Non-oily, non-halide; 362.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	246.0	0.000	0.000	0.400	246.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000030060**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: WET SUMP OR FILTER CAKE - NON-OILY,	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization

4693

State: Ohio **ID #: 0000030065**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED NON-BURNABLES

Matrix: Heterogeneous Debris **Waste Type: MLLW**

Waste Stream Description and Source:
Contaminated non-burnables; 200 Plants 2 & 3, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
6.4	6,855.0	0.000	0.000	6.4	6,855.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000030065**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED NON-BURNABLES	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008C	Tech.	Macroencapsulation

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

4693

State: Ohio | ID #: 0000030074

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED NON-BURNABLES

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated non-burnables; 100 Plant 1, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	4.0	0.800	1,136.0	1.000	1,140.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000030074**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED NON-BURNABLES	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 0000030075**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED NON-BURNABLES	
Matrix: Inorganic Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Contaminated non-burnables; 210 Plants 2 & 3, Digestion.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	14.0	0.000	0.000	0.200	14.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000030075**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED NON-BURNABLES	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 0000030080**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED SOIL, ROCKS, DEBRIS,	
Matrix: Aqueous Liquid	**Waste Type: MLLW**

Waste Stream Description and Source:
Contaminated soil, rocks, debris, with free liquids; 211 Plants 2 & 3, Digestion, South Side Digestors.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	229.0	0.000	0.000	0.200	229.0	0.000	0.000

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000030080

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SOIL, ROCKS, DEBRIS, W/

Matrix: Aqueous Liquid | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002B	Tech.	Deactivation
D004	Conc.	Vitrification
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D011	Conc.	Stabilization

State: Ohio | ID #: 0000030081

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DISCARD PROCESS RESIDUES, TRAILER CAKES,

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Discard process residues, trailer cakes, slurries, raffinates; 235 Plants 2 & 3, Hot Raffinate Bldg.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	387.0	0.000	0.000	0.200	387.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Ignitable, Corrosive, or Reactive Only

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio ID #: 0000030081
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: DISCARD PROCESS RESIDUES, TRAILER CAKES,
Matrix: Organic Sludges/Particulates Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002A	Tech.	Deactivation

State: Ohio | ID #: 0000040122

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: THORIUM TRAILER CAKES; WASTE SLURRIES

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Thorium trailer cakes; waste slurries; 732 Laboratory General Analytical.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	183.0	0.200	183.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio | ID #: 0000040122

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: THORIUM TRAILER CAKES; WASTE SLURRIES

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002C	Tech.	Deactivation
D005	Conc.	Chemical Precipitation; or Stabilization
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration

State: Ohio | ID #: 0000040137

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: UNFIRED REDUCTION CHARGES PLUS CaF2

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Unfired reduction charges plus CaF2; Building 320.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	1.000	0.200	1.000	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000040137**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: UNFIRED REDUCTION CHARGES PLUS CaF2	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000040152

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP THO2 HIGH IN FLUORIDE

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Scrap ThO2 high in fluoride; building 362.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	58.0	0.400	58.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio	**ID #: 0000040152**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SCRAP THO2 HIGH IN FLUORIDE	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000040181

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: THORIUM NITRATE SOLUTION

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:
Thorium nitrate solution; FAK.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	2,283.0	0.400	2,283.0	0.000	0.000

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio	**ID #: 0000040181**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: THORIUM NITRATE SOLUTION	
Matrix: Aqueous Liquid	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002A	Tech.	Deactivation
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization

State: Ohio | ID #: 0000040185

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: IMPURE THORIUM NITRATE (SOLID)

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Impure thorium nitrate (solid); CBH.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	839.0	0.200	839.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio | ID #: 0000040185

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: IMPURE THORIUM NITRATE (SOLID)

Matrix: Inorganic Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 0000040186**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: IMPURE THORIUM NITRATE (SOLID)	
Matrix: Inorganic Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Impure thorium nitrate (solid); FZC.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	3.7	2,002.0	3.7	2,002.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio	**ID #: 0000040186**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: IMPURE THORIUM NITRATE (SOLID)	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000050002

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-RECOVERABLE TRASH

Matrix: Organic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Non-recoverable trash; 732 Laboratory General, Analytical.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	25.0	0.200	35.0	0.600	60.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050002**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-RECOVERABLE TRASH	
Matrix: Organic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
F003	Conc.	Incineration
F005A	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

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State: Ohio	ID #: 0000050008
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SUMP CAKE - COPPER CONTAMINATED	
Matrix: Organic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:
Sump cake copper contaminated; 761 Building 45, general sump.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
31.4	36,156.0	0.800	731.0	32.2	36,887.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000050008

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SUMP CAKE - COPPER CONTAMINATED

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation

State: Ohio | ID #: 0000050010

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-RECOVERABLE TRASH

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Non-recoverable trash; 100 Plant 1, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	212.0	0.200	212.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio

ID #: 0000050010

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-RECOVERABLE TRASH

Matrix: Heterogeneous Debris

Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration
F005A	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000050014

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-RECOVERABLE TRASH

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Non-recoverable trash; 530 Plant 5, Casting Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.000	455.0	1.000	455.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050014**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-RECOVERABLE TRASH	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D019		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 0000050022**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED WATER	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:
Contaminated water; 140 Plant 1, sampling.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	11.0	0.200	11.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050022**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED WATER	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
F003	Conc.	Incineration

State: Ohio	ID #: 0000050025
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED GRAPHITE	
Matrix: Inorganic Debris	Waste Type: MLLW

Waste Stream Description and Source:
Contaminated graphite; 824 Plant 8, Oxidation System, Box Furnace.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	414.0	0.400	414.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050025**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED GRAPHITE	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000050031

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED METALLIC FILTER ELEMENTS

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated metallic filter elements; 900 Plant 9, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
3.3	1,295.0	0.000	0.000	3.3	1,295.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio **ID #: 0000050031**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED METALLIC FILTER ELEMENTS

Matrix: Inorganic Debris **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D010	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio **ID #: 0000050036**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED BURNABLE

Matrix: Heterogeneous Debris **Waste Type: MLLW**

Waste Stream Description and Source:
Contaminated burnable; 824 Plant 8, Oxidation System, Box Furnace.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.9	1,169.0	1.9	1,169.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050036**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED BURNABLE	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization
F002	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 0000050058**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: DUST COLLECTOR BAGS	
Matrix: Inorganic Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Dust collector bags; 732 Laboratory General Analytical.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	12.0	0.000	0.000	0.200	12.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050058**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: DUST COLLECTOR BAGS	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

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State: Ohio	ID #: 0000050061
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: DUST COLLECTOR BAGS	
Matrix: Inorganic Debris	Waste Type: MLLW

Waste Stream Description and Source:
Dust collector bags; 965 Plant 9, Sump Liquor Processing.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	50.0	0.000	0.000	0.200	50.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio	**ID #: 0000050061**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: DUST COLLECTOR BAGS	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000050063

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: ROASTED MgF2/OTHER MATERIAL

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Roasted MgF2/other material; 826 Plant 8, Oxidation System, Rotrary Kiln.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.5	2,352.0	0.000	0.000	1.5	2,352.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio

ID #: 0000050063

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: ROASTED MgF2/OTHER MATERIAL

Matrix: Inorganic Debris

Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D008B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

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State: Ohio	**ID #: 0000050068**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-OILY SLUDGE FOR ROASTING	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

Waste Stream Description and Source:
Non-oily sludge for roasting; 761 Building 45, General Sump.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.8	1,637.0	12.2	12,400.0	14.0	14,037.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio
ID #: 0000050068
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: NON-OILY SLUDGE FOR ROASTING
Matrix: Organic Sludges/Particulates
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation

State: Ohio	ID #: 0000050070
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-OILY SLUDGE FOR ROASTING	
Matrix: Organic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:
Non-oily sludge for roasting; 824 Plant 8, Oxidation System, Box Furnace.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.400	333.0	0.400	333.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000050070

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-OILY SLUDGE FOR ROASTING

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio **ID #: 0000050072**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SUMP WATER

Matrix: Organic Liquids **Waste Type: MLLW**

Waste Stream Description and Source:
Contaminated sump water and hydraulic oil; 137 Plant 1, Drum Reconditioning, Drum Baler.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.600	672.0	0.600	672.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio
ID #: 0000050072
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: CONTAMINATED SUMP WATER AND HYDRAULIC
Matrix: Organic Liquids
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D008B	Conc.	Stabilization
D019		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration
F003	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio | ID #: 0000050079

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: INCINERATOR CINDERS

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Incinerator cinders; 762.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
4.4	2,771.0	0.000	0.000	4.4	2,771.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050079**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: INCINERATOR CINDERS	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

State: Ohio | ID #: 0000050085

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: WET CAKE, NON-OILY/HALIDE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Wet cake, non-oily halide; 100 Plant 1, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	56.0	0.200	56.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050085**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: WET CAKE, NON-OILY/HALIDE	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
F002	Conc.	Incineration
F003	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio | ID #: 0000050089

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED MAGNESIUM

Matrix: Reactive Metals | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated magnesium; 510 Plant 5, Metal Reduction Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
35.1	13,192.0	0.100	46.0	35.2	13,238.0	0.000	0.000

Treatability Group:
MLLW CH, Reactive Metals

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050089**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED MAGNESIUM	
Matrix: Reactive Metals	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D003E	Tech.	Deactivation

State: Ohio	ID #: 0000050090
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED MAGNESIUM	
Matrix: Reactive Metals	Waste Type: MLLW

Waste Stream Description and Source:
Contaminated magnesium; 500.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
2.3	966.0	0.000	0.000	2.3	966.0	0.000	0.000

Treatability Group:
MLLW CH, Reactive Metals

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050090**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED MAGNESIUM	
Matrix: Reactive Metals	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001F	Tech.	Deactivation
D003E	Tech.	Deactivation

State: Ohio | ID #: 0000050091

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DUST COLLECTOR RESIDUES - PYROPHORIC

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Dust collector residues - pyrophoric; 900 Plant 9, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	63.0	0.000	0.000	0.200	63.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000050091

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DUST COLLECTOR RESIDUES - PYROPHORIC

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D008B	Conc.	Stabilization

State: Ohio	ID #: 0000050095
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED INSOLUBLE OIL	
Matrix: Organic Liquids	Waste Type: MLLW

Waste Stream Description and Source:
Contaminated insoluble oil; 900 Plant 9, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	168.0	0.000	0.000	0.200	168.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio
ID #: 0000050095
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: CONTAMINATED INSOLUBLE OIL
Matrix: Organic Liquids
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

State: Ohio | ID #: 0000050096

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NONRECOVERABLE TRASH

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Nonrecoverable trash; 765 Building 45, Water Treatment.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	153.0	0.200	153.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000050096**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NONRECOVERABLE TRASH

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D007	Conc.	Chemical Reduction followed by Stabilization
F003	Conc.	Incineration

State: Ohio | ID #: 0000050098

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED SOIL, ROCKS, BRICKS

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated soil, rocks, bricks, and ceramics; 100 Plant 1.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
26.6	35,720.0	0.000	0.000	26.6	35,720.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050098**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED SOIL, ROCKS, BRICKS AND	
Matrix: Soils	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	ID #: 0000050100
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: COPPER CONTAMINATED SUMP CAKE - LOW U	
Matrix: Inorganic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:

Copper contaminated sump cake - low U; 811 Plant 8, Wet-Chemical System, Primary Calciner.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.800	525.0	0.800	525.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000050100**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: COPPER CONTAMINATED SUMP CAKE - LOW U

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio | ID #: 0000050101

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DISCARD PROCESS RESIDUES

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Discard process residues; 765 Building 45, Water Treatment.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	145.4	160,076.0	145.4	160,076.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050101**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: DISCARD PROCESS RESIDUES	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
D043		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

State: Ohio | ID #: 0000050102

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: PROCESS RESIDUES, TRAILER CAKES,

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Process residues, trailer cakes, slurries, raffinates; 610 Plant 6, Rolling.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	54.0	0.000	0.000	0.400	54.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	ID #: 0000050102
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: PROCESS RESIDUES, TRAILER CAKES,	
Matrix: Inorganic Sludges/Particulates	Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization

4693

State: Ohio | ID #: 0000050113

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: ROASTED CALCIUM-PRECIPITATED SUMP AND FILTER CAKES

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Roasted calcium-precipitated sump and filter cakes; 825 Plant 8, Oxidation Furnace Number 1.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	4.0	1,489.0	4.0	1,489.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000050113

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: ROASTED CALCIUM-PRECIPITATED SUMP AND

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

4693

State: Ohio	ID #: 0000050129
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SCRAP U3O8 - LOW F	
Matrix: Organic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:

Scrap U3O8 - low F; 825 Plant 8, Oxidation System, Oxidation Furnace Number 1.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	7.9	6,159.0	7.9	6,159.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio
ID #: 0000050129
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: SCRAP U3O8 - LOW F
Matrix: Organic Sludges/Particulates
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio | ID #: 0000050131

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP U3O8 - LOW F

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Scrap U3O8 - low F; 732 Laboratory.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.500	56.0	0.500	56.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000050131

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP U3O8 - LOW F

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

State: Ohio | ID #: 0000050148

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP U3O8 HIGH F

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Scrap U3O8 high F; 534 Plant 5, Casting Area, Crucible Burnout

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
113.2	399,257.0	0.600	522.0	113.8	399,779.0	-	5,000.0

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

All future waste generated is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio	**ID #: 0000050148**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SCRAP U3O8 HIGH F	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification

State: Ohio | ID #: 0000050152

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP U3O8 OR THO2, HIGH FLUORIDE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Scrap U3O8 or THO2, high Fluoride; 822 Plant 8, Oxidation System, Rotex Screening.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	8.7	13,663.0	8.7	13,663.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000050152

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP U3O8 OR THO2, HIGH FLUORIDE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

State: Ohio | ID #: 0000050154

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: ROASTED CALCIUM-PRECIPITATED SUMP OR

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Roasted Calcium-precipitated sump or filter cakes; 811 Plant 8, Wet-Chemical System, Primary Calciner.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	33.9	21,092.0	33.9	21,092.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050154**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: ROASTED CALCIUM-PRECIPITATED SUMP OR	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

4693

State: Ohio	ID #: 0000050165
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: ROASTED OFF-SITE SUMP CAKE	
Matrix: Inorganic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:

Roasted off-site sump cake; 826 Plant 8, oxidation system, Rotary Kiln.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
11.5	14,409.0	0.400	553.0	11.9	14,962.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050165**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: ROASTED OFF-SITE SUMP CAKE	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

4693

State: Ohio	ID #: 0000050169
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-OILY SLUDGE FOR ROASTING	
Matrix: Inorganic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:
Non-oily sludge for roasting; 920 Plant 9, Casting

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	202.0	0.200	202.0	1.0	1,136.0

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio	**ID #: 0000050169**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-OILY SLUDGE FOR ROASTING	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

State: Ohio | ID #: 0000050170

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SALT SLUDGE FOR PLANT 8

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Salt sludge for plant 8; 400 Plant 4.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.800	602.0	0.000	0.000	0.800	602.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000050170

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SALT SLUDGE FOR PLANT 8

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D019		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

State: Ohio | ID #: 0000050173

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SALT SLUDGE, CHLORIDE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Salt sludge, chloride; 642 Plant 6, Heat Treating, Salt-Oil Furnace.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
3.3	4,805.0	0.000	0.000	3.3	4,805.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000050173

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SALT SLUDGE, CHLORIDE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

State: Ohio | ID #: 0000050174

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SALT SLUDGE, CHLORIDE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Salt sludge, chloride; 643 Plant 6, Heat Treating, NU Sal Furnace.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
5.4	20,042.0	0.000	0.000	5.4	20,042.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050174**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SALT SLUDGE, CHLORIDE	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

4693

State: Ohio	ID #: 0000050175
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SALT SLUDGE,CHLORIDE	
Matrix: Inorganic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:
Salt sludge, chloride; 920 Plant 9, Casting.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.000	500.0	0.000	0.000	1.000	500.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

505

State: Ohio | ID #: 0000050175

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SALT SLUDGE,CHLORIDE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

State: Ohio | ID #: 0000050177

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: FURNACE SALT,NON CHLORIDE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Furnace salt, non chloride; 914.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.800	835.0	0.000	0.000	0.800	835.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000050177**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: FURNACE SALT,NON CHLORIDE

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D004	Conc.	Vitrification
D008B	Conc.	Stabilization

State: Ohio	ID #: 0000050180
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: FURNACE SALT,NON-CHLORIDE	
Matrix: Inorganic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:
Furnace salt, non-chloride; 620 Plant 6, Machining.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
7.7	10,733.0	0.200	222.0	7.9	10,955.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio
ID #: 0000050180
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
Waste Stream Name: FURNACE SALT,NON-CHLORIDE
Matrix: Inorganic Sludges/Particulates
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D010	Conc.	Stabilization

4693

State: Ohio | ID #: 0000050183

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP SALTS,LOW F

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Scrap salts, low f; 661 Plant 6, Degreasing and Pickling, Derby Pickling.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.320	59.0	0.100	157.0	0.420	216.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio

ID #: 0000050183

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP SALTS,LOW F

Matrix: Inorganic Sludges/Particulates

Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio | ID #: 0000050185

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP SALT,HIGH F

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Scrap salt, high f; fxa Piketon Plant.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	5.0	0.000	0.000	0.200	5.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050185**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SCRAP SALT,HIGH F	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration

State: Ohio	ID #: 0000050188
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SCRAP SALTS,HIGH F	
Matrix: Inorganic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:
Scrap salts, high f; 407 Plant 4, General, Bank 7.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
2.5	1,888.0	0.000	0.000	2.5	1,888.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000050188**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP SALTS,HIGH F

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D010	Conc.	Stabilization

State: Ohio	**ID #: 0000050200**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY SLUDGE FOR OXIDATION	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

Waste Stream Description and Source:
Oily sludge for oxidation; 610 Plant 6, Rolling.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	90.0	0.200	90.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000050200

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY SLUDGE FOR OXIDATION

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001F	Tech.	Deactivation
F001	Conc.	Incineration

State: Ohio | ID #: 0000050202

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY SLUDGE FOR OXIDATION

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Oily sludge for oxidation; 920 Plant 9, Casting.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	88.0	0.200	88.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

State: Ohio **ID #: 0000050202**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY SLUDGE FOR OXIDATION

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001F	Tech.	Deactivation
D010	Conc.	Stabilization

State: Ohio | ID #: 0000050204

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY SLUDGE FOR OXIDATION

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Oily sludge for oxidation; 951 Plant 9, Machining, Le Blond Rapid Borer.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	153.0	0.000	0.000	0.200	153.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050204**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY SLUDGE FOR OXIDATION	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001F	Tech.	Deactivation
D010	Conc.	Stabilization

State: Ohio | ID #: 0000050293

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: U3O8 FOR REOXIDATION

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
U3O8 for reoxidation; hxa United Nuclear Corp., Handford, WA.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
5.0	3,564.0	0.000	0.000	5.0	3,564.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000050293

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: U3O8 FOR REOXIDATION

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification

State: Ohio | ID #: 0000050314

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP SALTS AND FLOOR SWEEPINGS

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Scrap salts and floor sweepings - high fluoride ; 341 Plants 2 & 3, Pilot Plant Remelt and Casting, Remelt Furnace.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	114.0	0.000	0.000	0.200	114.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000050314

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SCRAP SALTS AND FLOOR SWEEPINGS - HIGH

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D010	Conc.	Stabilization

State: Ohio **ID #: 0000050323**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SOLIDIFIED FURNACE SALTS - NON-CHLORIDE

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

Waste Stream Description and Source:

Solidified furnace salts - non-chloride; 913 Plant 9, General, Rockwell Furnaces - Molten Salt Cleaning.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
141.8	111,782.0	0.200	199.0	142.0	111,981.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000050323**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SOLIDIFIED FURNACE SALTS - NON-CHLORIDE

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification

State: Ohio	**ID #: 0000050339**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SLUDGES, OILY, FOR OXIDATION, HIGH FREE	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

Waste Stream Description and Source:
Sludges, oily, for oxidation, high free metal; 620 Plant 6, Machining.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	2.3	1,603.0	2.3	1,603.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000050339

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SLUDGES, OILY, FOR OXIDATION, HIGH FREE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

State: Ohio | ID #: 0000050346

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: OILY SLUDGE FOR OXIDATION

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Oily sludge for oxidation; 940 Plant 9, Machining.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	292.0	0.000	0.000	0.400	292.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050346**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: OILY SLUDGE FOR OXIDATION	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001F	Tech.	Deactivation

State: Ohio | ID #: 0000050347

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DISCARD PROCESS RESIDUE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Discard process residue; 767 Building 45, Boiler Plant.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	180.0	0.000	0.000	0.200	180.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio | ID #: 0000050347

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DISCARD PROCESS RESIDUE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation

State: Ohio | ID #: 0000050349

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DUST COLLECTOR RESIDUES - HIGH FLORIDE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Dust collector residues - high fluoride; 800 Plant 8.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	87.0	0.200	87.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
All future waste generation is due to environmental restoration activities. ER activities are being conducted according to good operating practices.

EPA CODES
Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

State: Ohio **ID #: 0000050351**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DUST COLLECTOR RESIDUES-HIGH FLOURIDE

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

Waste Stream Description and Source:
Dust collector residues - high fluoride; 313 Plants 2 & 3, Green Salt Production, Dust Collectors.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	267.0	0.000	0.000	0.200	267.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

4693

State: Ohio	**ID #: 0000050351**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: DUST COLLECTOR RESIDUES-HIGH FLOURIDE	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D008B	Conc.	Stabilization

State: Ohio | ID #: 0000050355

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: DISCARD PROCESS RESIDUE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Discard process residue; 761 Building 45, General Sump.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
3.3	3,680.0	0.000	0.000	3.3	3,680.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

4693

State: Ohio	**ID #: 0000050355**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: DISCARD PROCESS RESIDUE	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration

State: Ohio | ID #: 0000050358

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED NON-BURNABLE

Matrix: Organic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated non-burnable; 742 Procurement, Decontamination.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.800	1,447.0	0.000	0.000	0.800	1,447.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Debris, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio	**ID #: 0000050358**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: CONTAMINATED NON-BURNABLE	
Matrix: Organic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio **ID #: 0000050359**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-RECOVERABLE TRASH

Matrix: Organic Liquids **Waste Type: MLLW**

Waste Stream Description and Source:
Non-recoverable trash; 600 Plant 6, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.800	1,091.0	0.000	0.000	0.800	1,091.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050359**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-RECOVERABLE TRASH	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

State: Ohio | ID #: 0000050361

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-RECOVERABLE TRASH

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Non-recoverable trash; 600 Plant 6, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.416	274.0	0.416	274.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment technologies under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio **ID #: 0000050361**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-RECOVERABLE TRASH

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration

State: Ohio | ID #: 0000050367

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-RECOVERABLE TRASH

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Non-recoverable trash; 201 Plants 2 & 3, General, Maintenance.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.200	195.0	0.000	0.000	0.200	195.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000050367**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-RECOVERABLE TRASH

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

State: Ohio	**ID #: 0000050387**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SALT SLUDGE, CHLORIDE	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

Waste Stream Description and Source:
Salt sludge, chloride; 730 Laboratory General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.400	324.0	0.000	0.000	0.400	324.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000050387**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SALT SLUDGE, CHLORIDE

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization

State: Ohio	**ID #: 0000050405**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-RECOVERABLE TRASH	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

Waste Stream Description and Source:
Non-recoverable trash; 600 Plant 6, General.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.600	1,454.0	0.000	0.000	0.600	1,454.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio	**ID #: 0000050405**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-RECOVERABLE TRASH	
Matrix: Inorganic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization

State: Ohio | ID #: 0000050406

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: FURNACE SALT, CHLORIDE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Furnace salt, chloride; 642 Plant 6, Heat Treating, Salt-Oil Furnace.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	5.6	13,565.0	5.6	13,565.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio **ID #: 0000050406**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: FURNACE SALT, CHLORIDE

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D011	Conc.	Stabilization

State: Ohio **ID #: 0000050407**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: NON-RECOVERABLE TRASH

Matrix: Heterogeneous Debris **Waste Type: MLLW**

Waste Stream Description and Source:
Non-recoverable trash; 003.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	480.0	0.200	480.0	0.000	0.000

Treatability Group:
MLLW CH, Heterogeneous Debris, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio	**ID #: 0000050407**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-RECOVERABLE TRASH	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 0000060011**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-RECOVERABLE TRASH	
Matrix: Inorganic Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
Non-recoverable trash; 700 waste management.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
11.0	8,399.0	0.000	0.000	11.0	8,399.0	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio	**ID #: 0000060011**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: NON-RECOVERABLE TRASH	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000060068

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED INSOLUBLE OIL

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Contaminated insoluble oil; 503 Plant 5, General, Oil Storage Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.600	498.0	0.600	498.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000060068**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED INSOLUBLE OIL

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
F001	Conc.	Incineration

State: Ohio **ID #: 0000060069**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED INSOLUBLE OIL

Matrix: Organic Liquids **Waste Type: MLLW**

Waste Stream Description and Source:
Contaminated insoluble oil; 510 Plant 5, Metal Reduction Area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.2	1,371.0	1.5	514.0	2.7	1,885.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000060069**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: CONTAMINATED INSOLUBLE OIL

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
F001	Conc.	Incineration

State: Ohio | ID #: 0000060119

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SLUDGES, OILY, FOR OXIDATION HIGH FREE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Sludges, oily, for oxidation high free metal; 741 Procurement, Garage.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	3.3	2,972.0	3.3	2,972.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000060119**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SLUDGES, OILY, FOR OXIDATION HIGH FREE

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio | ID #: 0000060123

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: SOLVENT SEMISOLD

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Solvent semisold; 736 Service Bldg. and Admin. Bldg., Laundry.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.200	40.0	0.200	40.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio	**ID #: 0000060123**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: SOLVENT SEMISOLD	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D039		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration

State: Ohio | ID #: 0000060149

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: U3O8 FROM BOX FURNACE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
U308 from box furnace; 824 Plant 8, Oxidation System, Box Furnace.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
52.2	40,761.0	0.000	0.000	52.2	40,761.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

4693

State: Ohio | ID #: 0000060149

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: U3O8 FROM BOX FURNACE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Ohio | ID #: 0000060152

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: U3O8 ROTEXED PLANT 8 FURNACE PRODUCT

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

U3O8 rotexed plant 8 furnace product; 5 Plant 8, Oxidation System, Oxidation Furnace Number 1.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	71.8	75,624.0	71.8	75,624.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

The waste stream is no longer being generated.

State: Ohio **ID #: 0000060152**

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: U3O8 ROTEXED PLANT 8 FURNACE PRODUCT

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio | ID #: 0000060331

Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Waste Stream Name: WATER\GAS MIXTURE TANK #9

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Water/gas mixture tank #9; 741 Procurement, Garage.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	4.4	3,945.0	4.4	3,945.0	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time. All waste streams are being evaluated for appropriate treatment under CERCLA.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:
1) Not Applicable.

The waste stream is no longer being generated.

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State: Ohio	**ID #: 0000060331**
Site: FERNALD ENVIRONMENTAL MANAGEMENT PROJECT	
Waste Stream Name: WATER\GAS MIXTURE TANK #9	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D018		Not currently prohibited under the LDR Program.

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TECHNOLOGY

DEVELOPMENT

SUMMARIES

Fernald Environmental Management Project

FEMP-TDS-1

April 1993

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Target Site: Fernald
Location site: Fernald

Programs/Facilities Supported:
This project is intended to be the bench/pilot scale demonstration of vitrification technology.

ID: 56

Program Title: Minimum Additive Waste Stabilization (MAWS)

Summary Description:
The MAWS technology demonstration program is an integrated waste treatment system. Vitrification is the core technology which will be used for stabilization of waste sludges and other contaminated material. The process technology is integrated with soil washing to reduce the overall volume of the waste to be vitrified. Ion exchange will be used to treat contaminated water from the soil washing process. Another potential benefit of the integrated approach is to use the soil waste stream and other treatment residues as a raw material additive for the vitrification process. The ultimate goal of the MAWS program is to demonstrate the cost-effectiveness and feasibility of waste volume reduction by the integrated treatment process. The initial MAWS Bench-Scale Unit will treat Pit 5 sludges with FEMP soils.

Summary Purpose/Need:

Goals of this process are to minimize additives thereby reducing cost and volume as well as to produce a glass form that as a minimum passes the EPA leach test. In addition, it is expected that the vitrification process will be proven to effectively remove or render non-leachable organics for which the waste is listed, in order to allow delisting of the final glass form. The process is expected to handle the ranges of constituents anticipated. The amount of organic that can be destructed will be determined during delisting runs by spiking organic into materials to be vitrified. Destruction and removal efficiency (DRE) has not been discussed in detail, however, since the goal of vitrification is to provide a "delistable" final form, it is anticipated that DRE will be required to be greater than 99 percent.

Summary Result/Endpoint/Deliverable:

The end-point is a demonstration of the 300 Kg melter system at the Fernald site in FY 93. If chosen as the best treatment, additional funding for scaleup will be allocated.

BDAT: HLVIT
Functional Areas: waste destruction & stabilization
thermal treatment unit - high residue
final form glass

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Target Site: Fernald
Location site: Fernald

Programs/Facilities Supported:
CERCLA ROD

ID: 410

Program Title: Soil Washing Treatability Study

Summary Description:
A soil washing treatability study is currently being conducted under the guidance of OU5. The guidelines for this study, contained in the Treatability Study Work Plan for Operable Unit 5: Soil Washing, adhere to EPA's Guidelines for Conducting Treatability Studies under CERCLA. The study, in support of evaluating remedial alternatives for soil as part of OU5's RI/FS, is designed to conduct both remedy-screening and remedy-selection testing.

Soil washing is a physical/chemical treatment process that initially involves the separation of soil into different particle-size fractions. Reagent formulations in the washing solutions are used in the extraction of radionuclides and organic and inorganic compounds from these different size fractions. The contaminants may be separated from the wash stream into a concentrated residue for further treatment (eg., stabilization or vitrification).

Remedy-screening tests consist of bench-scale studies designed to evaluated individual treatment process potentially applicable for soil washing. Results from this testing aid in selecting specific treatment processes that can be tested on a pilot-scale level during remedy-selection testing.

Remedy-selection testing consist of combining physical separation techniques with chemical extraction processes into a single treatment process. The testing of this process on a pilot-plant level enables both the processes and results to be directly scalable to full size soil washing operating system.

Summary Purpose/Need:
The purpose of this treatability study is to generate data for the detailed analysis of alternatives in the FS. A primary consideration is to integrate the soil washing treatability technology being evaluated in this study with other technology evaluations being conducted for on-site remediation of OU5.

Summary Result/Endpoint/Deliverable:
All design work for the soil washing process system and support utilities has been completed. The fabrication of all skids has also been completed by a local Cincinnati construction company. All project related documentation and startup support activities are on schedule. The installation of the soil washing pilot-plant is scheduled for completed by the later part of March. Anticipated system startup of the system is projected for the first week in April, 1993. The requirements of the Treatability Study Work Plan will be satisfied during the initial operation of the process. A phased approach for operation of the pilot system is currently being developed for the next twelve (12) months. Priorities during this period include batch process optimization, ID Program requirements, and the conversion of the process to a continuous operating mode.

BDAT: NEUTR PRECP RMETL

Functional ares: Chemical physical treatment - radionuclide removal

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23.3 Mound Plant

Site Summary

The Mound Plant, located in south-central Ohio, has conducted testing and development of nuclear weapons components and processes since 1947 in support of the national defense programs. About 56 m^3 of mixed wastes have been or are projected to be generated (Table 23.3-1) as a result of operations conducted in performing these missions.

The WPS provides detailed information on each mixed waste stream. Table 23.3-2 details the treatment facility, the wastes that have been assigned to the treatment facility, and the wastes that are currently unassigned. Assignments of other wastes will be made by the site in the future after assignment options are fully evaluated.

Transuranic (TRU) Waste. Mound currently stores about 3.2 m^3 of mixed TRU (MTRU) waste and projects that approximately 0.2 m^3 of additional TRU wastes will be generated through the end of 1997. This waste will be processed as needed (characterized, repackaged, immobilized) to meet the waste acceptance criteria of the Waste Isolation Pilot Plant (WIPP). Planned disposal of TRU waste is at WIPP.

There are no existing facilities at Mound that can treat TRU waste. Currently the Mound inventory is being stored.

Mixed Low-Level Waste (MLLW). Mound currently stores about 51 m^3 of MLLW, which includes low-level waste and TRU waste reclassified as MLLW. Roughly 1.5 m^3 of MLLW is projected to be generated through the end of 1997, with none of this from environmental restoration activities.

There is 1 existing MLLW treatment facility at Mound, the Mound Glass Melter. There are no additional planned facilities. Currently, the Mound MLLW inventory is not being treated. Commercial facilities are being evaluated to treat about 85 percent of the total stored MLLW volume (generated by 3 waste streams). When permits are granted, the Mound Glass Melter will be able to treat MLLW.

Treatment technology options have not been analyzed for most of Mound's other waste streams because the RCRA and radioactive contaminants are not well characterized.

General

Mound Plant, located in Miamisburg, Ohio, about 16 km southwest of Dayton (Figure 23-1), is operated by EG&G Mound Applied Technologies for DOE. Since 1947, Mound Plant's mission has been the development of processes for the nuclear-weapons program, production of non-nuclear components for nuclear weapons, and diagnostic testing of explosive and nuclear components. Other programs include the manufacture of stable isotopes for research, the development and manufacture of small chemical heat sources for the defense program, recovery and purification of tritium from scrap materials, and the development and fabrication of heat sources fueled by plutonium-238 to provide power for satellites and spacecraft. Mound Plant has 120 buildings on 1.24 km^2 of land and employs approximately 1650 people. The Mound Plant is a CERCLA site.

TABLE 23.3-1
Mixed Wastes at the Mound Facility

Waste Type/Matrix	Number of Waste Streams	Inventory		Number of Waste Streams	Five-Year Projection	
		(m^3)	(kg)		(m^3)	(kg)
WASTE TYPE -- MLLW						
CH, Organic Liquids	2	1.14	1,702.30	0	0.00	0.00
CH, Heterogeneous Debris	1	0.23	181.00	0	0.00	0.00
CH, Lab Packs With Metals	2	43.22	13,301.40	0	0.00	0.00
CH, Lab Packs Without Metals	1	0.14	14.66	0	0.00	0.00
CH, Liquid Mercury	1	0.10	29.50	1	<0.10	0.96
CH, Elemental Lead	1	4.99	4,117.42	1	0.68	454.00
CH, Batteries (lead Acid, Cadmium)	1	0.85	1,024.00	1	0.79	1,104.00
Sub-Total MLLW:	9	50.67	20,370.28	3	1.47	1,558.96
WASTE TYPE -- MTRU						
CH -alpha, Cemented Solids	1	2.04	1,003.60	0	0.00	0.00
CH -alpha, Elemental Lead	1	1.13	404.50	1	0.23	95.00
Sub-Total MTRU:	2	3.17	1,408.10	1	0.23	95.00
TOTAL:	11	53.84	21,778.38	4	1.70	1,653.96

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TABLE 23.3-2
Mound Facility
Mixed Waste Treatment Facilities
Current and Planned Facilities - Treatment Category

Facility/System	Operating Status *	Feed Types	Final Waste Form	HLW MTRU MLLW	Alpha **	RH CH	Hg	Other Toxic Metals	Toxic Organics
Mound Glass Melter	Exists, Plan To Use, 1995	Liquids, Sludges, Solids	To Be Determined	MLLW		CH		√	√

* Because DOE is still in the planning/conceptual stage, in the design stages, or in the construction stage for these facilities, schedules and capacities are subject to changes based on the availability of funds, results of treatability studies, permit issuance, etc.

** Transuranic alpha greater than 10 nCi/g.

TABLE 23.3-3
Mound Facility
Mixed Waste Treatment Facilities
Existing, Plan to Use for Mixed Wastes

Facility/System	Treatment Type(s)	Allowable Waste		Ident. Of MW Streams To Be Treated	Capacity (m3/yr) **	Date Avail. For Use **
		Radioactive Type(s) *	Physical/Chemical Matrix			
Mound Glass Melter	Vitrification	MLLW, CH	Liquids, Sludges, Solids	MOUND 2063	200.0	1995

* ALPHA refers to transuranic alpha greater than 10 nCi/g

** Because DOE is still in the planning/conceptual stage, in the design stages, or in the construction stage for these facilities, schedules and capacities are subject to changes based on the availability of funds, results of treatability studies, permit issuance, etc.

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Mound Plant has 2 MTRU waste streams about 3.2 m^3 (1400 kg) from plutonium operations and 9 MLLW streams about 50.7 m^3 (20,370 kg) from general laboratory analyses and equipment maintenance (Table 23.3-1). These streams are discussed individually in the Waste Profile Sheets. Inventory data are current as of December 31, 1992.

23.3.1 Mixed Waste

23.3.1.1 High-Level Waste

There is no HLW stored at Mound and none will be generated.

23.3.1.2 Mixed Transuranic Waste

Mound Plant's 2 MTRU waste streams consist of corrosive wastes from Pu-238 operations and lead shielding removed from gloveboxes and other equipment during decommissioning. Neither stream is subject to LDR storage prohibitions. Both have been characterized by process knowledge and are contact-handled. Only the lead shielding will be generated in the future. An estimated 0.2 m^3 (95 kg) of MTRU lead waste will be produced in the next 5 years. MTRU wastes are planned for disposal in the Waste Isolation Pilot Plant (WIPP) in New Mexico if the wastes meet the final Waste Acceptance Criteria developed at WIPP.

Mound has reported 252 m^3 of non-MTRU in inventory pending shipment off-site at some future time[1], so the inventory volume of 3.2 m^3 represents only 1 percent of the total TRU inventory (mixed and non-mixed).

23.3.1.3 Mixed Low-Level Waste

The 2 major components of the MLLW inventory are lab packs with scintillation cocktails (about 85 percent of the total MLLW volume) and lead shielding from decommissioned gloveboxes and other equipment (about 10 percent). Remaining MLLW consists of drained lead batteries, ethylene dichloride, lab packs with silver and beryllium, liquid mercury, PCB- and tritium-contaminated kerosene, PCB- and plutonium-contaminated oil, and miscellaneous laboratory chemicals. All streams are contact-handled and characterized by process knowledge. Primary radiological contaminants are plutonium and tritium. Approximately 18 percent (9.2 m^3) of the total MLLW volume is subject to the LDR storage prohibition.

Waste minimization and cessation of some operations at Mound Plant have reduced the number of MLLW streams from 9 to 3. Specific waste-minimization activities include substitution of a nonhazardous scintillation cocktail, elimination of chlorinated solvents, and institution of chemical exchange procedures among various groups. An estimated 1.5 m^3 (1600 kg) of MLLW will be generated during the next 5 years.

The only radionuclide in Mound's MLLW that poses special issues for treatment is tritium, which must be contained to protect workers and the general public. Any tritium release during treatment must be reported. Treatment options have not been determined for most of Mound's MLLW. Commercial treatment facilities are being evaluated to treat the scintillation cocktail waste stream and to decontaminate the lead shielding. These 2 streams comprise about 85 percent of the total stored volume of MLLW.

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[1] Mound Plant, ERWM Site Specific Plan, May 19, 1992.

23.3.2 Treatment Facilities and Technology

The Mound Glass Melter (MGM) is the only on-site mixed waste treatment facility (Tables 23.3-2 and 23.3-3) at Mound. The MGM will be used to treat liquid and solid MLLW. Construction is complete, but the melter has not received its operating permit from the State of Ohio.

The MGM consists of a melt chamber lined with refractory material with an outer shell of stainless steel connected to an off-gas emission control system. During cold start-up, soda-lime/silica glass cullet will be heated in the melt chamber by a propane burner. After the glass melts, heated electrodes will maintain the glass in the molten state. When the melt has reached a temperature of 1,000 to 1,333 °C, waste will be introduced into the melt chamber through a feed port in the top of the melter. At the end of the process run, glass waste will be poured into molds for cooling. It is anticipated that the MGM will begin operations in 1995.

The alpha content of wastes treated at the melter must be < 10 nCi/g. When operational, the MGM will be able to treat 200 m^3 of waste per year. Since total MLLW inventory is about 51 m^3 and only 1.5 m^3 is projected to be generated during the next 5 years, the facility would have excess capacity during its first year of operation and would be available to handle appropriate D&D wastes from facility shutdown and CERCLA operations wastes during subsequent years, should any mixed waste be generated by these operations.

23.3.3 Technology Development

Mound is in the initial stages of an investigation to assess the viability of a Packed Bed Reactor/Silent Discharge Plasma Technology to treat the waste stream of organic liquids. There are no site-specific technology development activities for Mound Plant.

23.3.4 Environmental Restoration Waste

Operations at Mound generate sanitary, hazardous, radioactive, and mixed wastes. The operations at the site using tritium have historically generated both airborne and liquid waste streams. Trace levels of chlorinated organics in the groundwater may be from process solvents. The processing, handling and storage of plutonium 238 resulted in the contamination of several laboratories, building support areas, and soil on and off site. The storage, handling and repackaging of thorium sludge resulted in on-site soil contamination.

The Mound environmental restoration program includes a CERCLA cleanup program and D&D activities for plutonium processing buildings. A CERCLA Section 120 Federal Facilities Agreement was signed in August 1990 by EPA and DOE. The long-range objective of the CERCLA program is to remediate all potential release sites to allow unrestricted land use. The CERCLA program is in the early phase of the Remedial Investigation/Feasibility Study process. The Records of Decision for most of the operable units will be finalized in the mid-1990s. D&D operations began in FY 1978 and will continue until FY 2003. D&D activities are conducted solely under the jurisdiction of the Atomic Energy Act. Residual soil contamination after final D&D (to contamination levels that would allow unrestricted release) will be assessed under CERCLA, cleaned up under D&D, and verified under the CERCLA program driven by the Federal Facilities Agreement.

Environmental restoration accomplishments include: removing 3 underground storage tanks, completing the West Powerhouse PCB removal action, completing sampling of radioactively contaminated soil in

areas where removals are underway or planned, initiating fieldwork to collect data on potential release sites where little or no data are available, removing remaining contaminated soil on the waste transfer system project, decontaminating 1 area in the plutonium processing building, and initiating removal of plutonium contaminated soil from the Special Metallurgical Building. More information on contaminated media associated with environmental restoration activities is provided in Chapter 2.

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WASTE

PROFILE

SHEETS

Mound Plant

MOUND-WPS-1

April 1993

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ROADMAP TO WASTE PROFILE SHEETS (WPS)

Waste Profile Sheets (WPS) have been compiled in this report for each of the mixed waste streams identified at the different DOE sites. Each WPS is a concise summary of the information required by the FFCAct-1992, with waste stream specific data primarily derived from the Waste Management Information System (WMIS) database. Each WPS consists of the following items:

Header: The information in the header in each WPS includes the State, the official name of the site, an identification number, an identifying waste stream name, the waste type, and the waste matrix. The identification number is either a number assigned by the WMIS database or a number assigned by the site. The waste stream name is a unique identifier which corresponds to the name used in the WMIS database, or is assigned by the site. The waste type is either HLW, MTRU, or MLLW. The waste matrix corresponds to the categories (or their further subdivisions) defined earlier based on the physical and chemical form of the waste.

Waste Stream Description and Source: This section of the WPS presents a short description of the source of the waste and the waste stream characteristics.

Inventory Table: The inventory table in each WPS reports the volume (m^3) and/or mass (kg) of each waste stream currently in storage, and projected to be generated in the next five years. The table also indicates the date assumed in calculating the current and projected inventories. As required by the FFCAct-1992, the table also differentiates between waste not subject to LDR and that subject to LDR for the current inventory.

Treatability Group: This section lists the name of the treatability group to which the waste stream belongs.

Treatment Status, Technology Status: This section of the WPS lists the status of the technology that could be applied to the waste stream for compliance with the LDR. This section provides information on if the waste stream is currently being treated, and if technology options and facilities for the treatment exist.

Radiation Characteristics Section: This section of the WPS provides additional information on the radiological characteristics of the waste (in addition to characterizing the waste stream as HLW, MTRU, or MLLW). This section of the WPS specifies whether the waste stream is contact handled or remote handled, if the radionuclides are alpha or beta/gamma emitters, and if they contain activation products.

Radiation Effects Section: As required by the FFCAct-1992, this section of the WPS lists possible effects of the radiological characteristics of the waste stream on treatment technologies that could be applicable to that waste stream. For example, radiation levels may require remote handling of the waste and affect the design and operation of the treatment facility. The presence of volatile radionuclides may require the containment of all off-gases from the treatment system.

Waste Minimization Activities: As required by the FFCAct-1992, this section of the WPS provides information on the waste minimization practices being used for the waste stream. This section provides information on if the waste minimization practices include good operating practices, technology changes, raw material changes, product changes, etc.

EPA Code: This table of the WPS reports the EPA hazardous waste codes applicable to the waste stream, the basis for assigning the codes (process knowledge or sampling/analysis), the LDR basis (which is either technology based or concentration based), and the BDAT for each of the EPA hazardous waste codes.

In summary, the WPS for each waste stream, along with the site sections in the report for each State (Section B), summarize the site-specific information required by the FFCAct-1992.

State: Ohio	**ID #: 497**
Site: MOUND PLANT	
Waste Stream Name: SCINTILLATION COCKTAIL	
Matrix: Lab Packs with Metals	**Waste Type: MLLW**

Waste Stream Description and Source:

This waste is scintillation cocktail, which contains hazardous constituents. This scintillation cocktail waste was generated during routine counting operations on bio-assay, environmental and other radioactive samples containing primarily H-3 or PU-238.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
34.0	10,600.0	9.2	2,700.0	43.2	13,300.0	0.000	0.000

Treatability Group:

MLLW CH, Lab Packs with Metals, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. Once the vials have been repackaged and radiation levels determined they will be sent to a treatment facility. The Mound Glass Melter and a commercial facility are being considered to treat this waste.

Technology Status:

Assessing technologies to determine if the technology exists, and if so, whether it needs modification.

Radiation Characteristics:

1) Volatile radionuclide

Waste-Specific Radiation Effects on Treatment:

1) Treatment must consider containment of radioactive off-gases to protect treatment facility personnel and the public. Safeguard issues may be a concern. Treatment involves tritium release, which must be reported.
2) None.

Waste Minimization Activities:

1) Product change: product substitution and conservation; and change in product composition.

Waste is no longer generated. A nonhazardous cocktail has been substituted.

General Comments:

The radiation effects on treatment vary on each package. The radiation effects may be unknown or as specified in the radiation effects field.

State: Ohio	**ID #: 497**
Site: MOUND PLANT	
Waste Stream Name: SCINTILLATION COCKTAIL	
Matrix: Lab Packs with Metals	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
F003	Conc.	Incineration

The alternate LDR treatment standards for labpacks is incineration as a method of treatment and a requirement for the incinerator residues to meet the treatment standards for the TC toxic metals (i.e., D004-D008, and D010-D011).

State: Ohio	**ID #: 833**
Site: MOUND PLANT	
Waste Stream Name: CORROSIVES - TRU	
Matrix: Cemented Solids	**Waste Type: MTRU**

Waste Stream Description and Source:

This waste stream is TRU radionuclides in a caustic or acidic matrix. Process wastes and analytical wastes from PU 238 operations. The waste stream is no longer being generated.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
2.0	1,003.6	0.000	0.000	2.0	1,003.6	0.000	0.000

Treatability Group:

MTRU CH/AL, Cemented Solids

Treatment Status:

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.

Technology Status:

Not Applicable.

Radiation Characteristics:

1) Transuranic contaminants
2) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Not Applicable.

Waste is no longer being generated.

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State: Ohio	**ID #: 833**
Site: MOUND PLANT	
Waste Stream Name: CORROSIVES - TRU	
Matrix: Cemented Solids	**Waste Type: MTRU**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002A	Tech.	Deactivation
D002B	Tech.	Deactivation

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State: Ohio	**ID #: 835**
Site: MOUND PLANT	
Waste Stream Name: LEAD - TRU	
Matrix: Elemental Lead	**Waste Type: MTRU**

Waste Stream Description and Source:

Lead loaded dry gloves, lead shielding-TRU.Shielding removed from gloveboxes and other equipment during decommissioning operations.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.1	404.5	0.000	0.000	1.1	404.5	0.227	95.0

Treatability Group:

MTRU CH/AL, Elemental Lead, Toxic Metals w/o Mercury

Treatment Status:

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.

Technology Status:

Not Applicable.

Radiation Characteristics:

1) Transuranic contaminants
2) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) Certain isotopes of U, Pu, Am, Cm, Cf, Np and Th are non-accountable if present below specific levels, and require different levels of safeguards, depending on the amount present. Treatments resulting in concentration of the material can result in the "roll up" of large volumes of non-accountable wastes into a smaller volume of accountable waste or change a mixed low-level waste to a TRU waste.

Waste Minimization Activities:

1) Product change: product substitution and conservation; and change in product composition.

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State: Ohio	**ID #: 835**
Site: MOUND PLANT	
Waste Stream Name: LEAD - TRU	
Matrix: Elemental Lead	**Waste Type: MTRU**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008C	Tech.	Macroencapsulation

State: Ohio	**ID #: 836**
Site: MOUND PLANT	
Waste Stream Name: LEAD - LLW	
Matrix: Elemental Lead	**Waste Type: MLLW**

Waste Stream Description and Source:

This waste stream is waste lead. Shielding removed from gloveboxes and other equipment during decommissioning operations. Sources of this waste include: tritium operations from SW and T Buildings; Pu-238; Unknown source, cobalt-60; uranium; lab waste lead solids, unknown contamination.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
5.0	4,117.4	0.000	0.000	5.0	4,117.4	0.679	454.0

Treatability Group:

MLLW CH, Elemental Lead, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. The possibility of using a commercial facility to decontaminate this waste is being investigated. Radioactive contamination of this waste has not been well characterized.

Technology Status:

Technology assessment has not started. Technology options have not been analyzed.

Radiation Characteristics:

1) Volatile radionuclide
2) Beta/gamma emitter

Waste-Specific Radiation Effects on Treatment:

1) Treatment must consider containment of radioactive off-gases to protect treatment facility personnel and the public. Safeguard issues may be a concern. Treatment involves tritium release, which must be reported.
2) Treatment could result in plating, precipitation, or some other form of concentration, which could cause workers to receive a significant radiation exposure. The potential for concentration of beta and gamma emitters will affect the design and operation of a treatment facility.

Waste Minimization Activities:

1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.
2) Change in operations status; process interruptions; work stoppages; mission changes; and new processes.

State: Ohio	**ID #: 836**
Site: MOUND PLANT	
Waste Stream Name: LEAD - LLW	
Matrix: Elemental Lead	**Waste Type: MLLW**

The only component of this waste stream that is still being generated is the tritium-contaminated lead shielding from the SW and T buildings.

General Comments:
Other lead wastes radiation contaminant levels have not been determined.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008C	Tech.	Macroencapsulation

State: Ohio	**ID #: 837**
Site: MOUND PLANT	
Waste Stream Name: CONTAMINATED MERCURY	
Matrix: Liquid Mercury	**Waste Type: MLLW**

Waste Stream Description and Source:
This waste stream is mercury and clean-up residue. Waste is generated by clean-up activities.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.098	25.9	0.002	3.6	0.100	29.5	0.002	0.960

Treatability Group:
MLLW CH, Liquid Mercury, Toxic Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology assessment has not started. Technology options have not been analyzed. Tritium content has not been determined.

Radiation Characteristics:
1) Volatile radionuclide

Waste-Specific Radiation Effects on Treatment:
1) Treatment must consider containment of radioactive off-gases to protect treatment facility personnel and the public. Safeguard issues may be a concern. Treatment involves tritium release, which must be reported.

Waste Minimization Activities:
1) Not Applicable.

Waste is no longer generated.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D009D	Tech.	Amalgamation

State: Ohio **ID #: 2063**

Site: MOUND PLANT

Waste Stream Name: ETHYLENE DICHLORIDE - LLW

Matrix: Organic Liquids **Waste Type: MLLW**

Waste Stream Description and Source:

This is laboratory clean-out waste -- waste ethylene dichloride. Excess laboratory material from a radiologically controlled area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.005	2.3	0.005	2.3	0.000	0.000

Treatability Group:

MLLW CH, Organic Liquids, Ignitable, Corrosive, or Reactive Only

Treatment Status:

Have not identified a planned facility for this waste stream at this time. This waste is a potential candidate for treatment in the Mound Glass Melter.

Technology Status:

Technology assessment has not started. Technology options have not been analyzed.

Radiation Characteristics:

1) Volatile radionuclide

Waste-Specific Radiation Effects on Treatment:

1) Treatment must consider containment of radioactive off-gases to protect treatment facility personnel and the public. Safeguard issues may be a concern. Treatment involves tritium release, which must be reported.

Waste Minimization Activities:

1) Not Applicable.

Waste is no longer generated.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation

State: Ohio **ID #: 0000002064**

Site: MOUND PLANT

Waste Stream Name: LEAD WASTE DRAINED BATTERIES

Matrix: Batteries (lead acid, cadmium) **Waste Type: MLLW**

Waste Stream Description and Source:

Drained lead batteries that may contain plutonium contamination. The source of this waste stream is SM-Building electric fork lifts.

The reported weights for this waste stream include the drum or box weight.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.850	1,024.0	0.000	0.000	0.850	1,024.0	0.792	1,104.0

Treatability Group:

MLLW CH, Batteries (lead acid, cadmium), Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. Surface decontamination of the lead plates is not practical.

Technology Status:

Technology assessment has not started. Technology options have not been analyzed. Radioactive contamination has not been well characterized.

Radiation Characteristics:

Radiation level unknown.

Waste-Specific Radiation Effects on Treatment:

The radiation contaminant levels for battery wastes have not been determined. Therefore, the radiation effects on treatment are unknown.

Waste Minimization Activities:

1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008A	Tech.	Secondary Lead Smelting

State: Ohio | ID #: 0000002065

Site: MOUND PLANT

Waste Stream Name: KEROSENE, PCB, TRITIUM CONTAMINATED

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

Rinse from the hyraulic press in SW-Building. LDR effective date was 8/8/90. Waste was placed in stroage from 5/9/85 to 10/2/85. All weights include drum or box weight.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.1	1,700.0	0.000	0.000	1.1	1,700.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Liquids, Ignitable, Corrosive, or Reactive Only

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Assessing technologies to determine if the technology exists, and if so, whether it needs modification. Mound is in the initial stages of an investigation of a Packed Bed Reactor/Silent Discharge Plasma Technology to treat this waste stream. An assessment of the viability of this technology is being conducted.

Radiation Characteristics:

1) Volatile radionuclide

Waste-Specific Radiation Effects on Treatment:

1) Treatment must consider containment of radioactive off-gases to protect treatment facility personnel and the public. Safeguard issues may be a concern. Treatment involves tritium release, which must be reported.

Waste Minimization Activities:

1) Not Applicable.

Waste is no longer generated.

State: Ohio **ID #: 0000002065**

Site: MOUND PLANT

Waste Stream Name: KEROSENE, PCB, TRITIUM CONTAMINATED

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation

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State: Ohio **ID #: 0000002066**

Site: MOUND PLANT

Waste Stream Name: ABSORBED OIL, PCB, PLUTONIUM

Matrix: Heterogeneous Debris **Waste Type: MLLW**

Waste Stream Description and Source:

Absorbed oil containing PCBs with Plutonium contamination. The source of this waste stream is from the press in PP-Building, Room 146/148.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.227	181.0	0.000	0.000	0.227	181.0	0.000	0.000

Treatability Group:

MLLW CH, Heterogeneous Debris, Ignitable, Corrosive, or Reactive Only

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology assessment has not started. Technology options have not been analyzed. No technology assessment has been scheduled. The waste is not characterized for radiation or PCB content. The waste is heterogenous and will be very difficult to sample.

Waste-Specific Radiation Effects on Treatment:

Contains plutonium. Radiation level unknown.

Waste Minimization Activities:

1) Not Applicable.

Waste is no longer generated.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical,

State: Ohio	**ID #: 0000002066**
Site: MOUND PLANT	
Waste Stream Name: ABSORBED OIL, PCB, PLUTONIUM	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

or thermal), macro/microencapsulation or sealing.

State: Ohio **ID #: 0000002067**

Site: MOUND PLANT

Waste Stream Name: LAB PACKS WITH METALS

Matrix: Lab Packs with Metals **Waste Type: MLLW**

Waste Stream Description and Source:

Lab pack containing silver and beryllium. The source of this waste stream is unknown. The LDR effective date was 8/8/88. The waste was placed into storage on 3/5/87.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.020	1.4	0.000	0.000	0.020	1.4	0.000	0.000

Treatability Group:

MLLW CH, Lab Packs with Metals, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology assessment has not started. Technology options have not been analyzed. Material needs both RCRA and radionuclide characterization.

Radiation Characteristics:

1) Radionuclides or radiation level unknown

Waste-Specific Radiation Effects on Treatment:

The radiation contaminant levels of lab pack metals is unknown. Therefore, the radiation effects on treatment are unknown.

Waste Minimization Activities:

1) Not Applicable.

Waste is no longer generated.

General Comments:

The radiation contaminant levels of lab pack metals is unknown. Therefore, the radiation effects on treatment are unknown.

State: Ohio	**ID #: 0000002067**
Site: MOUND PLANT	
Waste Stream Name: LAB PACKS WITH METALS	
Matrix: Lab Packs with Metals	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D011	Conc.	Stabilization
P015	Tech.	Metals Recovery; or Thermal Recovery of Metals

The alternate LDR treatment standards for labpacks is incineration as a method of treatment and a requirement for the incinerator residues to meet the treatment standards for the TC toxic metals (i.e., D004-D008, and D010-D011).

State: Ohio **ID #: 0000002068**

Site: MOUND PLANT

Waste Stream Name: LAB PACKS WITHOUT METALS

Matrix: Lab Packs without Metals **Waste Type: MLLW**

Waste Stream Description and Source:

Lab packs contain a variety of materials including: oxidizers with Thorium and Uranium; corrosive solids; corrosives; ignitables; metal polish; and liquid corrosives. Sources of these wastes include: Thorium perchlorate, uranyl nitrate, cerous nitrate, potassium hydroxide, metallographic operations, tritium; and naval jelly, selenous acid rust retarder.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.143	14.7	0.000	0.000	0.143	14.7	0.000	0.000

Treatability Group:

MLLW CH, Lab Packs without Metals, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology assessment has not started. Technology options have not been analyzed. RCRA and radioactive contaminants need to be characterized.

Radiation Characteristics:

1) Radionuclides or radiation level unknown
2) Volatile radionuclide

Waste-Specific Radiation Effects on Treatment:

Several lab packs radiation contaminant levels have not been determined. Therefore, the radiation effects on treatment are unknown.

Waste Minimization Activities:

1) Not Applicable.

Waste is no longer generated.

General Comments:

Several lab pack radiation contaminant levels have not been determined. Therefore, the radiation effects on treatment are unknown.

State: Ohio **ID #: 0000002068**

Site: MOUND PLANT

Waste Stream Name: LAB PACKS WITHOUT METALS

Matrix: Lab Packs without Metals **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D001F	Tech.	Deactivation
D002A	Tech.	Deactivation
D002B	Tech.	Deactivation
D002C	Tech.	Deactivation
D007	Conc.	Chemical Reduction followed by Stabilization
D010	Conc.	Stabilization
U055	Tech.	Fuel Substitution; or Incineration

The alternate LDR treatment standards for labpacks is incineration as a method of treatment and a requirement for the incinerator residues to meet the treatment standards for the TC toxic metals (i.e., D004-D008, and D010-D011).

23.4 Portsmouth Gaseous Diffusion Plant

Site Summary

The Portsmouth Gaseous Diffusion Plant (PORTS) is located near Piketon, Ohio, 99 km south of Columbus. The site encompasses 15 km^2, and its major facilities are located within a 2 km^2 secure area. Martin Marietta Energy Systems, Inc., operates the plant for DOE. The PORTS mission is to produce enriched uranium for the nuclear power industry. The United States currently has 2 gas diffusion plants: Portsmouth and a plant near Paducah, Kentucky. The Paducah plant enriches UF_6 containing approximately 0.7 percent U-235 to 1.9 percent U-235. Enriched UF_6 is transported to Portsmouth where it is enriched to the final product assay.

The following mission-related PORTS activities generate mixed waste:

- Receipt and assay of UF_6 process feed material
- The staged, porous barrier, U-235 enrichment process
- Assay and shipment of enriched U-235 product material
- Facility maintenance and other supporting activities
- Environmental restoration
- Decontamination and decommissioning of obsolete equipment and facilities.

Mixed Waste Sources. Mixed waste managed at PORTS falls into 1 of 4 general source categories: ongoing waste generation by production and production support; environmental restoration; decontamination and decommissioning; and wastes that have accumulated on-site prior to FY 92.

Mixed Waste Inventory. All mixed waste generated and stored at PORTS is contact-handled MLLW. Uranium (α emitter) is the only radionuclide present in significant quantities, although traces of technetium may also be present. As of February 1993 the MLLW inventory is approximately 5,500,000 kg (Table 23.4-1). All this inventory is subject to the provisions of the LDR. Detailed quantitative and descriptive information for each waste stream may be found in the Waste Profile Sheets (WPS) at the end of Section 23.

Total MLLW to be generated during the next 5 years is estimated at 4,500,000 kg. As of February 1993 the majority of the waste streams have not been fully characterized by sampling and analysis; however, all waste streams are characterized by process knowledge. These characterizations are the basis for determining the applicable RCRA hazardous waste codes for each waste stream in the WPS.

Treatment Technology. Treatment technologies exist for all MLLW streams. The low-level uranium radiation poses no special handling problems. The technologies for treatment of wastes contaminated with enriched uranium are mainly affected by the constraints required for nuclear criticality safety and, to a lesser extent, the need for safeguarding special nuclear material. The technology specified for a particular waste will still be applicable, but the facility design and operating procedures will require modification relative to a typical commercial treatment facility. For example, incineration remains the required technology for mixed waste solids contaminated with organics and Polychlorinated Biphenals (PCBs), but the incinerator and off-gas treatment system require the use of a subcritical geometry or a batch operating mode to limit the mass of uranium in the system. Additional constraints for an off-site facility include the required Nuclear Regulatory Commission license and safeguard measures for highly enriched uranium.

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Table 23.4-1
Mixed Wastes at Portsmouth Gaseous Diffusion Plant

Waste Type/Matrix	Number of Waste Streams	Inventory		Number of Waste Streams	Five-Year Projection	
		(m^3)	(kg)		(m^3)	(kg)
WASTE TYPE -- MLLW						
CH, Organic Liquids	14	-	162,776.00	12	-	282,435.00
CH, Aqueous Liquid	12	-	61,327.40	12	-	195,883.21
CH, Organic Sludges/particulates	4	-	9,483.00	3	-	13,037.00
CH, Inorganic Sludges/particulates	13	-	210,002.50	11	-	212,092.40
CH, Soils	2	-	4,527,649.00	1	-	166,616.00
CH, Organic Debris	5	-	197,401.00	5	-	166,636.00
CH, Inorganic Debris	9	-	61,401.50	9	-	61,076.00
CH, Heterogeneous Debris	12	-	264,766.10	13	-	3,230,792.30
CH, Lab Packs With Metals	3	-	26,111.00	3	-	103,867.00
CH, Compressed Gases	2	-	798.10	2	-	563.00
CH, Liquid Mercury	1	-	123.00	1	-	50.50
CH, Batteries (lead Acid, Cadmium)	1	-	7,620.00	1	-	18,189.00
CH, Multiple	1	-	1,184.00	1	-	4,910.00

Table 23.4-1 (Continued)
Mixed Wastes at Portsmouth Gaseous Diffusion Plant

Waste Type/Matrix	Number of Waste Streams	Inventory		Number of Waste Streams	Five-Year Projection	
		(m^3)	(kg)		(m^3)	(kg)
WASTE TYPE -- MLLW						
Sub-Total MLLW:	79	-	5,530,642.60	74	-	4,456,147.41
TOTAL:	79	-	5,530,642.60	74	-	4,456,147.41

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Treatment technologies specified for PORTS waste streams exist in the commercial sector, but the facilities are not designed to handle wastes contaminated with enriched uranium. The only off-site treatment facility available for PORTS waste is the DOE K-25 Site TSCA incinerator located in Oak Ridge, Tennessee, which only accepts liquid waste.

Waste Management Status. The majority of PORTS waste streams have not been characterized by sampling and analysis. Aqueous waste streams are currently being treated on-site, and organic liquids are being treated at the K-25 Site TSCA incinerator. During 1992, these facilities treated 3,150,000 kg and 253,700 kg, respectively. One inorganic waste stream is being neutralized in-situ. The possibility of treating lead solids and batteries at a commercial facility is being investigated.

Although no treatment facility currently exists for PORTS MLLW sludges and solids, PORTS is planning a Waste Treatment Facility (FY 97 Line Item Project) to treat all of its mixed waste streams. A Feasibility Study Report kick-off meeting is scheduled for July 1993.

23.4.1 Mixed Waste

23.4.1.1 High-Level Waste

There is no high level waste (HLW) currently stored at PORTS and none is expected to be generated in the next 5 years.

23.4.1.2 Mixed Transuranic Waste

There is no MTRU waste currently stored at PORTS and none is expected to be generated in the next 5 years.

23.4.1.3 Mixed Low-Level Waste

Operations wastes account for approximately 18 percent of the total stored MLLW mass; the remainder is packaged soil from environmental restoration. Principal hazardous components are heavy metals and spent solvents. Facility maintenance generates site-wide waste streams, such as used light bulbs, paints and thinners, floor sweepings, batteries, aerosol cans, rags, gloves, and Personal Protective Equipment (PPE). Parts scheduled for repair or routine maintenance must first be cleaned and decontaminated. As part of decontamination, equipment may be stripped of corrosion-resistant coatings (e.g., nickel) and replated prior to being returned to service. These processes generate such waste streams as cleaning solvents, spent alkaline solutions, stripping and plating solutions, and sludge from the degreasing process. Equipment repair results in metal turnings and shavings and scrap metal.

Several waste streams are currently being treated on-site at the Decontamination Facility in Building X-705: motor cleaning solutions, spent alkaline solutions, laboratory waste, cleaning solutions, waste acid/bases, decontamination waste solutions, and some elements of the stream identified as "unused laboratory chemicals." Approximately 3,150,000 kg were processed in 1992. Five additional streams are scheduled to begin treatment at this facility after FY 94: flushing solution, waste antifreeze, blue print solutions, silver solutions, and waste water from painting booths.

Some organic liquid waste streams are sent to the K-25 Site TSCA incinerator at Oak Ridge, Tennessee; 253,700 kg were sent in 1992. Streams sent to the facility must have a U-235 assay < 1.0 percent, or

uranium content < 5 ppm. If the K-25 Site TSCA incinerator were to accept solids, streams from PORTS consisting of vapor-degreasing sludge and rags, gloves, filter cloth, and PPE could also be processed.

Stored waste streams generated by environmental restoration consist of MLLW soils (about 4,500,000 kg) and contaminated groundwater (22,000 kg). The latter is being treated at the carbon adsorption groundwater treatment facilities (Section 23.4.2.1), along with groundwater plumes from the X-749, X-231B, X-701B, and Little Beaver Creek areas. Soils contain low levels of halogenated solvents and uranium. Peroxidation (destruction of organic compounds by oxidation with hydrogen peroxide) and thermal vapor extraction are 2 technologies being evaluated for soil treatment by the Environmental Restoration Division.

Waste minimization is being incorporated into all PORTS processes. For example, an aggressive campaign is underway to eliminate vapor degreasers. Aqueous immersion cleaners and steam cleaners are under evaluation as possible alternative technologies. A washwater recycling system is being tested for the motor shop steam cleaning system, along with a proposed steam-cleaning system for the Compressor Shop. A system under development at the Oak Ridge K-25 site to recover nickel plating solutions is being investigated for use at Portsmouth. PORTS is converting to latex-based paints for all maintenance. Cleaning techniques have been modified and solvents substituted to reduce the amount of rags, gloves, wipes, sludges, and other solids generated. The paint spray booth is being reviewed for replacement by a booth that uses a dry filtering system, which will eliminate the "booth water" waste stream. Finally, the substitution of a phosphate-based corrosion inhibitor in the Recirculating Cooling Water/Recirculating Heating Water (RCW/RHW) system has eliminated 3 waste streams: chromate residue from the old inhibitor; large canvas curtains that are placed in the cooling towers; and spent filters and PPE from the Liquid Effluent Treatment Facility (LETF), which removed chromium from the cooling water by chemical reduction and precipitation. The canvas curtains had to be replaced periodically due to deterioration. The phosphate inhibitor is expected to prolong their useful lifetime, and they are not expected to require replacement during the next 5 years. Since chromium no longer must be removed from the cooling water, the LETF is shut down and is being decommissioned.

23.4.2 Treatment Facilities and Technology

23.4.2.1 Existing Treatment Facilities

Existing treatment facilities at PORTS (Table 23.4-2) consist of groundwater treatment units and a wastewater treatment facility. Three groundwater treatment facilities are currently operating: the X-622, which is treating the X-749 and X-231B groundwater plumes; the X-624, which treats groundwater from the Little Beaver Creek Interceptor Trench; and the X-701E, which treats groundwater from the X-701B area. All 3 use an activated carbon adsorption system to remove trichloroethylene, volatile organic compounds, iron, and uranium. The X-624 system also uses an air stripper. Effluent pH is adjusted to allow discharge either to the site sewage treatment plant or to the X-230-J7 pond, which collects the discharge from building drains and storm water runoff. The facilities operate continuously. Facility design incorporates wells that pump groundwater to the treatment system. The 3 facilities operating together can process about 454 liters of groundwater per minute (150 liters each) with an upgrade capacity of 908 liters per minute (300 liters each).

Groundwater treatment by carbon adsorption generates 2 waste streams: filters that remove suspended solids from the influent and deactivated carbon sludge. These 2 streams contribute about 1 percent to the total mass of stored MLLW.

Table 23.4-2
Portsmouth Gaseous Diffusion Plant
Mixed Waste Treatment Facilities
Currently in Use for Mixed Wastes

Facility/System	Treatment Type(s)	Allowable Waste		Ident. Of MW Streams To Be Treated	Normal Operating Capacity (m3/yr)
		Radioactive Type(s) *	Physical/Chemical Matrix		
X-622 Groundwater Treatment Facility	Carbon Adsorption	MLLW, CH	Groundwater, Aqueous Liquids	10078	79,576.0
X-624 Groundwater Treatment Facility	Air Stripping, Carbon Adsorption	MLLW, CH	Groundwater, Aqueous Liquids	10078	99,470.0
X-701E Groundwater Treatment Facility	Carbon Adsorption	MLLW, CH	Groundwater, Aqueous Liquids	10078	99,470.0
X-705 Decontamination Facility / Microfiltration	Neutralization, Filtration	MLLW, CH	Aqueous Liquids & Slurries	10069, 10081, 10083, 10107, 10108, 10109, 187, 189, 192, 2078, 2081, 2079, 2080	3,000.0
X-705 Decontamination Facility / Uranium Recovery System	Liquid Extraction, Neutralization, Filtration, Ion Exchange, Biodenitrofication	MLLW, CH	Aqueous Liquids & Slurries	10069, 10081, 10083, 10107, 10108, 10109, 187, 189, 192,	150.0

* ALPHA refers to transuranic alpha greater than 10 nCi/g

Table 23.4-2 (Continued)
Portsmouth Gaseous Diffusion Plant
Mixed Waste Treatment Facilities
Currently in Use for Mixed Wastes

Facility/System	Treatment Type(s)	Allowable Waste		Ident. Of MW Streams To Be Treated	Normal Operating Capacity (m3/yr)
		Radioactive Type(s) *	Physical/Chemical Matrix		
				2078, 2081, 2079, 2080	

* ALPHA refers to transuranic alpha greater than 10 nCi/g

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The X-705 Decontamination Facility contains 2 separate wastewater treatment systems. Both systems are designed to process corrosive aqueous waste streams that contain varying concentrations of uranium and toxic metals from decontamination and cleaning. The process to be used for a particular waste is determined by its uranium concentration. Waste streams with high uranium concentrations are processed through the uranium recovery system. Wastewater treatment sludges (MLLW) are generated by these processes.

The uranium recovery system consists of a liquid-liquid extraction system for selective removal of uranium, a neutralization/filtration system for pH adjustment and removal of toxic metals, an ion-exchange facility for removal of technetium, and a biological denitrification system. Effluent from the uranium recovery system is discharged under the National Pollutant Discharge Elimination System (NPDES) permit for Outfall 604. The system has a practical influent capacity (based on 3 shifts per day and 22 operating days per month) of about 13,000 liters/month (150 m^3/yr).

Uranium recovery generates 3 waste streams: the organic solvent phase from the liquid-liquid extraction, heavy metal sludge, and spent ion-exchange resin contaminated with technetium. Current inventory of these wastes is about 2.0 percent of total stored mass.

The microfiltration system consists of an oil and grease removal system (used as required) and a neutralization/concentration/filtration system for pH adjustment and removal of toxic metals. Effluent from the microfiltration system is discharged under the NPDES permit for Outfall 605. The system has a practical influent capacity (based on 3 shifts per day and 22 operating days per month) of about 250,000 liters per month (3000 m^3/yr). Sludge and filters from this process comprise a waste stream that is about 0.9 percent of total stored mass.

23.4.2.2 Planned Treatment Facilities

Two additional carbon adsorption groundwater treatment facilities to be built at PORTS, the X-622T and the X-623 (Table 23.4-3), will mimic the existing treatment units. The additional groundwater treatment capacity is estimated to be 170,000 m^3/yr. Plans call for the X-622T facility to begin operating in 1993, and the X-623 facility, in 1994.

Because DOE is still in the planning/conceptual stage, in the design stages, or in the construction stage for this facility, schedules and capacities are subject to changes based on the availability of funds, results of treatability studies, permit issuance, etc.

23.4.2.3 Treatment Facility Summary

Table 23.4-4 summarizes the capabilities of current and planned treatment facilities at PORTS. The table lists the physical form of both feed and treatment products, the current operating status of the plant, and whether the facility is intended for high-level, TRU, or low-level waste or a combination of these. This table indicates whether a facility is capable of treating remote-handled waste, as opposed to contact-handled waste only. The table also summarizes the relevant waste-acceptance parameters related to the chemical composition of the waste, such as the presence of transuranic isotopes, mercury, other toxic metals, and toxic organics. Parameters marked as acceptable are still subject to concentration limitations. For example, a facility may accept waste with uranium but only if the uranium is present below a certain concentration.

Table 23.4-3
Portsmouth Gaseous Diffusion Plant
Mixed Waste Treatment Facilities
Planned or Under Construction for Mixed Wastes

Facility/System	Treatment Type(s)	Allowable Waste		Ident. Of MW Streams To Be Treated	Design Capacity (m3/yr) **	Date Avail. For Treating MW **
		Radioactive Type(s) *	Physical/Chemical Matrix			
Waste Treatment Facility (1)	Incineration, Deactivation, Amalgamation, Stabilization, Neutralization	MLLW, CH	Various	To Be Determined	To Be Determined	Year To Be Determined
X-622T Groundwater Treatment Facility	Carbon Adsorption	MLLW, CH	Aqueous Liquids, Groundwater	2091	69,628.0	1993
X-623 Groundwater Treatment Facility	Carbon Adsorption	MLLW, CH	Groundwater, Aqueous Liquids	2091	99,470.0	1994

* ALPHA refers to transuranic alpha greater than 10 nCi/g

** Because DOE is still in the planning/conceptual stage, in the design stages, or in the construction stage for these facilities, schedules and capacities are subject to changes based on the availability of funds, results of treatability studies, permit issuance, etc.

Note (1): Planned for FY97 line item.

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Table 23.4-4
Portsmouth Gaseous Diffusion Plant
Current and Planned Facilities - Treatment Category
Mixed Waste Treatment Facilities

Facility/System	Operating Status *	Feed Types	Final Waste Form	HLW MTRU MLLW	Alpha **	RH CH	Hg	Other Toxic Metals	Toxic Organics
Waste Treatment Facility	Planned, Year To Be Determined	Various	Various	MLLW		CH	√	√	√
X-622 Groundwater Treatment Facility	Operating	Groundwater, Aqueous Liquids	Groundwater, Filters, Carbon Sludge	MLLW		CH			√
X-622T Groundwater Treatment Facility	Planned, 1993	Aqueous Liquids, Groundwater	To Be Determined	MLLW		CH			√
X-623 Groundwater Treatment Facility	Planned, 1994	Groundwater, Aqueous Liquids	To Be Determined	MLLW		CH			√
X-624 Groundwater Treatment Facility	Operating	Groundwater, Aqueous Liquids	Groundwater, Filters, Carbon Sludge	MLLW		CH			√

* Because DOE is still in the planning/conceptual stage, in the design stages, or in the construction stage for these facilities, schedules and capacities are subject to changes based on the availability of funds, results of treatability studies, permit issuance, etc.

** Transuranic alpha greater than 10 nCi/g.

Table 23.4-4 (continued)
Portsmouth Gaseous Diffusion Plant
Current and Planned Facilities - Treatment Category
Mixed Waste Treatment Facilities

Facility/System	Operating Status *	Feed Types	Final Waste Form	HLW MTRU MLLW	Alpha **	RH CH	Hg	Other Toxic Metals	Toxic Organics
X-701E Groundwater Treatment Facility	Operating	Groundwater, Aqueous Liquids	Groundwater, Filters, Carbon Sludge	MLLW		CH			√
X-705 Decontamination Facility / Microfiltration	Operating	Aqueous Liquids & Slurries	Water Sludge	MLLW		CH		√	
X-705 Decontamination Facility / Uranium Recovery System	Operating	Aqueous Liquids & Slurries	Organic Solvent, Heavy Metal Sludge, Ion Exchange Resin	MLLW		CH		√	

* Because DOE is still in the planning/conceptual stage, in the design stages, or in the construction stage for these facilities, schedules and capacities are subject to changes based on the availability of funds, results of treatability studies, permit issuance, etc.

** Transuranic alpha greater than 10 nCi/g.

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Approximately 3,150,000 kg of MLLW was treated at the X-705 Decontamination Facility during 1992 (Table 23.4-3). Total facility capacity is 3,150 m^3; therefore, the system was operating at full capacity. Current stored inventory of wastes treated by the X-705 facility is about 61,000 kg and roughly 196,000 kg are predicted to be generated during the next 5 years (Table 23.4-1).

About 253,700 kg of organic liquid waste was sent to the K-25 Site TSCA incinerator in 1992. Current stored inventory of TSCA-designed waste is about 154,000 kg and the total generation over the next 5 years is predicted to be 272,000 kg. It is assumed the K-25 Site TSCA incinerator will meet future PORTS generation rates for organic liquids.

Between the X-705 Decontamination Facility, the carbon adsorption units, and the K-25 Site TSCA incinerator, PORTS can treat 24 of its current and future waste streams. However, at present, many waste streams are not treated since no treatment facility has been identified.

23.4.3 Technology Development

There are no PORTS mixed waste streams for which no treatment technology exists. There are no site-specific technology development activities for PORTS.

23.4.4 Environmental Restoration Program

The site contains a number of surface impoundments, landfills, spoils areas, and storage and treatment facilities that are contaminated with various radionuclides and hazardous chemicals. About 132 solid waste management units have been identified and are the primary targets of ongoing investigations. The major environmental problem at the site is groundwater contamination that resulted primarily from the leaching of solvents that were used for industrial metal-cleaning maintenance operations. Some chromium contamination has also resulted from past anticorrosive maintenance activities for the plant cooling water systems.

The DOE has entered into agreements with EPA and the State of Ohio to outline the cleanup process and identify the oversight responsibilities of each agency. The EPA Administrative Consent Order addresses compliance with RCRA and CERCLA, as amended. The State of Ohio Consent Decree is similar to the EPA agreement and addresses remedial action activities regarding the appropriate handling of solid, hazardous, and mixed waste and contaminated water.

Environmental restoration activities have been initiated at the Portsmouth site to assess and clean up environmental contamination and to perform decontamination and decommissioning (D&D) activities at inactive/surplus facilities. For planning purposes, the site has been divided into quadrants based on groundwater flow, and a separate RCRA Facility Investigation/Corrective Measures Study process is being followed for each. The RCRA Facility Investigation is prepared to define the contamination problems, and the Corrective Measures Study is developed to assess cost-effective cleanup alternatives. These studies are then followed by an implementation phase during which the appropriate cleanup measures will be conducted.

A number of cleanup measures are already under way or have been completed at specific contaminated areas, and several of these activities are expected to generate mixed waste. The activities include (1) removing sludge from lagoons and placing them in new monocells of an existing on-site landfill, with subsequent closure of the lagoons; (2) removing, treating, and boxing sludge from holding ponds and dewatering the ponds for subsequent closure; (3) constructing interceptor trenches, a slurry wall and

subsurface drains, and a temporary groundwater treatment facility; (4) treating at least 42,000 gallons of hazardous wastewater; (5) conducting a technology demonstration project for soil remediation at an oil biodegradation plot; and (6) removing 4 underground storage tanks and associated contaminated soil. All storage tanks are being brought up to current standards, including diking and soil cleanup in spill areas for aboveground tanks. Plans are under way for additional cleanup and closure activities at several landfills, storage facilities, and tanks. Upcoming plans include demolishing and removing equipment and plugging legacy wells, as well as constructing a mixed waste treatment facility. More information on contaminated media associated with environmental restoration is in Chapter 2.

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WASTE

PROFILE

SHEETS

Portsmouth Gaseous Diffusion Plant

PORTS-WPS-1

April 1993

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ROADMAP TO WASTE PROFILE SHEETS (WPS)

Waste Profile Sheets (WPS) have been compiled in this report for each of the mixed waste streams identified at the different DOE sites. Each WPS is a concise summary of the information required by the FFCAct-1992, with waste stream specific data primarily derived from the Waste Management Information System (WMIS) database. Each WPS consists of the following items:

Header: The information in the header in each WPS includes the State, the official name of the site, an identification number, an identifying waste stream name, the waste type, and the waste matrix. The identification number is either a number assigned by the WMIS database or a number assigned by the site. The waste stream name is a unique identifier which corresponds to the name used in the WMIS database, or is assigned by the site. The waste type is either HLW, MTRU, or MLLW. The waste matrix corresponds to the categories (or their further subdivisions) defined earlier based on the physical and chemical form of the waste.

Waste Stream Description and Source: This section of the WPS presents a short description of the source of the waste and the waste stream characteristics.

Inventory Table: The inventory table in each WPS reports the volume (m^3) and/or mass (kg) of each waste stream currently in storage, and projected to be generated in the next five years. The table also indicates the date assumed in calculating the current and projected inventories. As required by the FFCAct-1992, the table also differentiates between waste not subject to LDR and that subject to LDR for the current inventory.

Treatability Group: This section lists the name of the treatability group to which the waste stream belongs.

Treatment Status, Technology Status: This section of the WPS lists the status of the technology that could be applied to the waste stream for compliance with the LDR. This section provides information on if the waste stream is currently being treated, and if technology options and facilities for the treatment exist.

Radiation Characteristics Section: This section of the WPS provides additional information on the radiological characteristics of the waste (in addition to characterizing the waste stream as HLW, MTRU, or MLLW). This section of the WPS specifies whether the waste stream is contact handled or remote handled, if the radionuclides are alpha or beta/gamma emitters, and if they contain activation products.

Radiation Effects Section: As required by the FFCAct-1992, this section of the WPS lists possible effects of the radiological characteristics of the waste stream on treatment technologies that could be applicable to that waste stream. For example, radiation levels may require remote handling of the waste and affect the design and operation of the treatment facility. The presence of volatile radionuclides may require the containment of all off-gases from the treatment system.

Waste Minimization Activities: As required by the FFCAct-1992, this section of the WPS provides information on the waste minimization practices being used for the waste stream. This section provides information on if the waste minimization practices include good operating practices, technology changes, raw material changes, product changes, etc.

EPA Code: This table of the WPS reports the EPA hazardous waste codes applicable to the waste stream, the basis for assigning the codes (process knowledge or sampling/analysis), the LDR basis (which is either technology based or concentration based), and the BDAT for each of the EPA hazardous waste codes.

In summary, the WPS for each waste stream, along with the site sections in the report for each State (Section B), summarize the site-specific information required by the FFCAct-1992.

State: Ohio	ID #: 31
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: TREATMENT FILTERS	
Matrix: Organic Debris	Waste Type: MLLW

Waste Stream Description and Source:

Waste is sediment on filters from carbon treatment units. The waste is generated during the treatment of groundwater. Filters are cloth-like bags used to remove soil, sediment, etc. from the water before passing it through carbon for organic removal.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	63,184.0	-	63,184.0	-	150,933.0

Treatability Group:

MLLW CH, Organic Debris, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

New innovative treatment technologies are being investigated for future remediation acitivities, including peroxidation and bioremediation. Air stripping prior to carbon adsorption is also bing considered. This would prolong the life of the filters.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical,

State: Ohio	ID #: 31
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: TREATMENT FILTERS	
Matrix: Organic Debris	Waste Type: MLLW

or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 35

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: VAPOR DEGREASER SLUDGE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

The waste was generated during a vapor degreaser operation. It is a spent halogenated solvent sludge.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	81.0	-	81.0	-	405.0

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Product change: product substitution and conservation; and change in product composition.

An aggressive campaign is underway to eliminate the use of vapor degreasers at PORTS. Aqueous immersion cleaners and steam cleaners are being investigated as suitable alternative cleaning technology.

General Comments:

CODE BASIS: The TCLP results are pending. GENERAL COMMENT: Do not expect to generate too much in the future.

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State: Ohio

ID #: 35

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: VAPOR DEGREASER SLUDGE

Matrix: Organic Sludges/Particulates

Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

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State: Ohio	ID #: 172
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: GLASS BEADS	
Matrix: Inorganic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is generated by glass-blasting of brass, bronze and babbitt components in the decontamination facility and in two maintenance shops. It consists of small beads of glass and the surface particles/residue. Surfaces could contain dirt, grease or metals (lead, cadmium).

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	3,122.5	-	3,122.5	-	6,032.0

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

Alternative blasting methods are being evaluated, such as CO2 cleaning.

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization

State: Ohio | ID #: 175

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: LIGHT BULBS

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Spent fluorescent and incandescent light bulbs and spent metal-halide bulbs are generated site-wide.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	4,715.0	-	4,715.0	-	13,608.0

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/ Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:
1) Waste avoidance due to recycling/reuse: solvent, oil, and metals recycling; chemical exchange and reuse; and packaging material reuse.

The recycling of light bulbs that are not radiologically contaminated is being pursued. All necessary requirements to install a crusher are being investigated.

EPA CODES
Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration

State: Ohio	ID #: 175
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: LIGHT BULBS	
Matrix: Inorganic Debris	Waste Type: MLLW

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 176

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: WASTE METAL TURNINGS

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:

This waste is generated from machining operations of brass, bronze, and babbitt components in the X-710 Lab machine shop.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	828.0	-	828.0	-	1,136.0

Treatability Group:

MLLW CH, Inorganic Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. Technology exists but no facility is available. Possible candidate for treatment at proposed Y-12 regional MW treatment facility for solid wastes.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Waste avoidance due to recycling/reuse: solvent, oil, and metals recycling; chemical exchange and reuse; and packaging material reuse.

Metal turnings that are not radiologically contaminated are segregated and collected as scrap metal.

State: Ohio | ID #: 176

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: WASTE METAL TURNINGS

Matrix: Inorganic Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 183

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: WASTE HG, METALLIC

Matrix: Liquid Mercury | Waste Type: MLLW

Waste Stream Description and Source:

This stream is generated in the switchyards, cascade, cooling tower pumphouse, water treatment facility and the decontamination facility. Waste is elemental mercury from manometer cleaning or replacement.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	123.0	-	123.0	-	50.5

Treatability Group:

MLLW CH, Liquid Mercury, Toxic Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The recycling of mercury that is not radiologically contaminated is under investigation.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D009D	Tech.	Amalgamation

State: Ohio | ID #: 185

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: MACHINE COOLANT/OIL

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

The waste is a water-based coolant used in the machine shop to cool grinders, lathes, etc. The coolant is mixed with the machinery's oil. Analysis has shown this mixture to contain lead and cadmium. Waste oil in the coolant may contain benzene.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	7,430.0	-	7,430.0	-	15,395.0

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility. Portions of this waste stream currently do not meet the K-25 Site TSCA Incinerator Waste Acceptance Criteria.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Waste avoidance due to recycling/reuse: solvent, oil, and metals recycling; chemical exchange and reuse; and packaging material reuse.

The use of a machine coolant recycling system is under investigation. The machine shop is scheduled to undergo a process waste assessment in the future.

State: Ohio ID #: 185

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: MACHINE COOLANT/OIL

Matrix: Organic Liquids Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 187
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: MOTOR CLEANING SOLUTIONS
Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is an alkaline aqueous solution with traces of oil and metals. It is generated in the motor shop's cleaning and is stored in an 800 gallon, stainless steel container until it can be processed through the X-705 Microfiltration system. If the system is shut down the waste is stored in the X-7725 storage building. Sampling analysis indicated lead and cadmium. Based on process knowledge, the solution could contain grease, iron, copper, nickel, zinc, small amounts of oil, and chromium.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	0.000	-	0.000	-	51,261.0

Treatability Group:

MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:

Currently being treated on-site at the X-705 Decontamination Facility.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Waste avoidance due to recycling/reuse: solvent, oil, and metals recycling; chemical exchange and reuse; and packaging material reuse.

A wash water recycling system is being reviewed and tested for the motor shop steam cleaning system.

State: Ohio | ID #: 187

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: MOTOR CLEANING SOLUTIONS

Matrix: Aqueous Liquid | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002B	Tech.	Deactivation
D006B	Conc.	Chemical Precipitation
D008B	Conc.	Chemical Precipitation

State: Ohio | ID #: 189

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: SPENT ALKALINE SOLUTIONS

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:

This waste is generated in the X-700 and X-705 buildings from cleaning parts and removing grease, respectively. The solution is primarily sodium hydroxide.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	8,974.0	-	8,974.0	-	8,117.0

Treatability Group:

MLLW CH, Aqueous Liquid, Toxic Organics and Metals w/o Mercury

Treatment Status:

Currently being treated on-site at the X-705 Decontamination Facility.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The cleaning operations will undergo a process waste assessment in the future.

State: Ohio | ID #: 189

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: SPENT ALKALINE SOLUTIONS

Matrix: Aqueous Liquid | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002B	Tech.	Deactivation
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 192

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: NICKEL STRIPPING SOLUTION

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:

This waste is generated from a Nickel Stripping operation in the X-700 Bldg. Nitric Acid is used to strip nickel from the surface of nickel-plated steel parts.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	399.0	-	399.0	-	1,196.0

Treatability Group:

MLLW CH, Aqueous Liquid, Ignitable, Corrosive, or Reactive Only

Treatment Status:

Plan to treat on-site at the existing X-705 Decontamination Facility.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This system is scheduled to undergo a process waste assessment in the future.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002A	Tech.	Deactivation

State: Ohio	ID #: 193
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: PLATING SOLUTION	
Matrix: Aqueous Liquid	Waste Type: MLLW

Waste Stream Description and Source:
Waste stream is generated from a electroless nickel plating operation. Nickel plating is used for corrosion prevention purposes.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	667.0	-	667.0	-	1,191.0

Treatability Group:
MLLW CH, Aqueous Liquid, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Plan to treat on-site at the existing X-705 Decontamination Facility.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:
A system to recover the nickel plating solution being developed by the K-25 site in Oak Ridge, Tennessee, is being investigated for use at Portsmouth.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002A	Tech.	Deactivation

State: Ohio	ID #: 194
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: U RECOVERY SOLVENT WASTE	
Matrix: Organic Liquids	Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is generated from the X-705 uranium recovery process. Uranium is recovered from a nitrated solution by liquid extraction. The solvent phase of this process is made up of tri-butyl phosphate and mineral spirits or Stoddard Solvent.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	1,067.0	-	1,067.0	-	953.0

Treatability Group:

MLLW CH, Organic Liquids, Toxic Metals w/ Mercury

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility. Portions of the K-25 Site waste stream currently do not meet the K-25 Site TSCA Incinerator Waste Acceptance Criteria.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This system is scheduled to undergo a process waste assessment in the future.

State: Ohio | ID #: 194

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: U RECOVERY SOLVENT WASTE

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D002A	Tech.	Deactivation
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
D009B	Tech.	Mercury Roast/Retort

State: Ohio | ID #: 196

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: CHROMIC ACID TANK CLOSURE WASTE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Waste will be generated from the closure of Tank #7 in the X-700 converter maintenance and chemical cleaning building. Past operations performed in this tank included bright dipping of aluminum parts. A variety of sludges will be generated in closure activities. This waste is characterized based on process knowledge as wastewater treatment sludge from an electroplating process (F006) that may contain As (D004), Ba (D005) Cd (D006B).

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	126.0	-	126.0	-	32,885.0

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. Being neutralized during closure activity.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

Waste minimization was addressed in the planning stage.

State: Ohio | ID #: 196

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: CHROMIC ACID TANK CLOSURE WASTE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
F006	Conc.	Alkaline Chlorination followed by Chemical Precipitation; and Stabilization; or Incineration; or High Temperature Metals Recovery

State: Ohio | ID #: 197

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: WASTE CYANIDE PLATING SOLUTIONS

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:

The waste was generated in the Instrument Shop's plating process. The waste plating solutions from the cyanide process are characterized through process knowledge and MSDS information. Solutions contain sodium cyanide, silver cyanide, and potassium cyanide. Although the plating process operations have ceased, the area is still being cleaned. Therefore, waste is being generated.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	80.0	-	80.0	-	0.000

Treatability Group:

MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

Will no longer be generated once decontamination and decommissioning are completed.

State: Ohio ID #: 197

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: WASTE CYANIDE PLATING SOLUTIONS

Matrix: Aqueous Liquid Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D003A	Conc.	Chemical Oxidation followed by Alkaline Chlorination
D007	Conc.	Chemical Reduction followed by Stabilization
D011	Conc.	Stabilization
F007	Conc.	Alkaline Chlorination followed by Chemical Precipitation; and Stabilization

State: Ohio	ID #: 485
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: HEAVY METAL SLUDGE	
Matrix: Inorganic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is generated in the X-705 uranium recovery facility. The recovery process uses acid and alkaline solutions. The solutions are processed through a liquid-liquid extraction system to recover the uranium as an oxide. Raffinate from the extraction columns is processed through a filter to remove precipitated heavy metals. Based on process knowledge, the sludge may also contain lead and mercury.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	99,026.0	-	99,026.0	-	56,692.0

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This system is scheduled to undergo a process waste assessment in the future.

State: Ohio ID #: 485

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: HEAVY METAL SLUDGE

Matrix: Inorganic Sludges/Particulates Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
D009B	Tech.	Mercury Roast/Retort

State: Ohio | ID #: 758

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: MICROFILTRATION SLUDGE AND FILTERS

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

This waste is generated in the X-705 facility. Solutions containing low U concentrations are processed through a microfiltration unit to remove precipitated metals. The process produces this waste stream and water that is discharged to an NPDES outfall.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	48,705.0	-	48,705.0	-	60,468.0

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This system is scheduled to undergo a process waste assessment in the future.

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization

State: Ohio | ID #: 759

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: PAINTS AND THINNERS

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

The waste stream is produced in the paint shop. The shop uses mineral spirits, lacquers, and/or solvent-containing thinners.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	31,822.0	-	31,822.0	-	23,502.0

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility. Portions of this waste stream currently do not meet the K-25 Site TSCA Incinerator Waste Acceptance Criteria.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Product change: product substitution and conservation; and change in product composition.

The paint shop is in the process of converting its inventory to latex based paints. This would eliminate the use of RCRA hazardous solvents, used as thinners, in most painting applications.

State: Ohio ID #: 759
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: PAINTS AND THINNERS
Matrix: Organic Liquids Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D035		Not currently prohibited under the LDR Program.
F002	Conc.	Incineration
F003	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio	ID #: 829
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: ION EXCHANGE RESIN	
Matrix: Inorganic Sludges/Particulates	Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is generated in the X-705 decontamination facility during the U recovery process. The filtrate from the heavy metal filtration process is passed through ion exchange columns to remove technetium. Hydroxyl form anionic resin is used to capture the technetium. Based on analysis, the resin is characterized as hazardous due to the presence of mercury.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	14,309.0	-	14,309.0	-	18,779.0

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This system is scheduled to undergo a process waste assessment in the future.

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D009B	Tech.	Mercury Roast/Retort

State: Ohio | ID #: 2068

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: WASTE OIL

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

This waste is waste oil from process systems and motor vehicles that operate in process buildings. The waste stream can contain solvents as well as metals.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	71,309.0	-	71,309.0	-	180,565.5

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics and Metals w/ Mercury

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility. Portions of this waste stream currently do not meet the K-25 Site Incinerator Waste Acceptance Criteria.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The recycling of oil both on and off-site is under investigation. The X-750 Garage is reviewing information on an oil to diesel fuel blending unit.

State: Ohio ID #: 2068
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: WASTE OIL
Matrix: Organic Liquids Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration
D018		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F003	Conc.	Incineration
F004	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio | ID #: 0000002069

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: LEAD SOLIDS

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is generated from spills, relief valve testing, routine maintenance in the switchyards, dismantling operation using a radio frequency heater. The waste stream contains lead seals, cables, scrap metal and soils.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	9,391.0	-	9,391.0	-	9,408.0

Treatability Group:

MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

Lead which contains no added radioactivity is being collected as scrap metal.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000002070

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: FLUORINE GENERATOR SCRAP AND DEBRIS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:

Fluorine is generated on-site for process applications by an electrolytic process using potassium fluoride and hydrogen fluoride. When the solution is spent, the sludge and liquid are removed from the generator cell. If necessary, the interior metallic parts and carbon blades are removed and become waste generator scrap. PPE, gloves, rags and other debris are also generated by this activity. Waste fluorine generator scrap and debris are characterized as hazardous based on analysis that found them to contain arsenic.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	2,972.0	-	2,972.0	-	1,798.0

Treatability Group:

MLLW CH, Heterogeneous Debris, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This system will undergo a process waste assessment in the future.

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the

State: Ohio	ID #: 0000002070
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: FLUORINE GENERATOR SCRAP AND DEBRIS	
Matrix: Heterogeneous Debris	Waste Type: MLLW

following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000002071

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: WASTE DECONTAMINATION SOLIDS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:

This waste is generated from decontamination operations performed on process equipment. The process equipment is decontaminated before it is repaired (remove U) and after it is repaired (remove contaminants that would react with the diffusion process). Halogenated hydrocarbons are used for the second decontamination operation because of their compatibility with the diffusion process equipment. The decontamination operations generate various waste solids including sludges and other solids removed from process equipment. These solids are characterized as hazardous wastes because analysis found that the waste solids contain cadmium (D006B); based on process knowledge, the waste solids may contain arsenic (D004), barium (D005), chromium (D007), lead (D008B), mercury (D009D), selenium (D010), silver (D011), methyl ethyl ketone (D035) and trichloroethylene (D040). The sludges may contain trichloroethylene, 1,1,1-trichloroethane, refrigerant 113, xylene, acetone, mek and toluene. Also included are rags, gloves, towels, shoes and sponges. The waste code is D008B.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	4,625.0	-	4,625.0	-	1,178.0

Treatability Group:

MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Product change: product substitution and conservation; and change in product composition.

Many cleaning techniques have been modified and solvents substituted to allow for a reduction in the generation of rags, gloves, wipes, sludges and other solids.

State: Ohio | ID #: 0000002071

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: WASTE DECONTAMINATION SOLIDS

Matrix: Heterogeneous Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration
D010	Conc.	Stabilization
D011	Conc.	Stabilization
D035		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F002	Conc.	Incineration
F005A	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000002072

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: RCW/RHW SYSTEM WASTE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

The recirculating cooling water (RCW)/recirculating heating water (RHW) system waste results from the substitution of a phosphate-based corrosion inhibitor for a chromate-based inhibitor, and spills.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	7,331.0	-	7,331.0	-	6,804.0

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Product change: product substitution and conservation; and change in product composition.

Due to the conversion of the system to the non-hazardous inhibitor, the chromate residue should decrease.

General Comments:

Code Basis: high confidence.

State: Ohio | ID #: 0000002072

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: RCW/RHW SYSTEM WASTE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

State: Ohio | ID #: 0000002073

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: FLOOR SWEEPINGS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:

Floor sweepings are generated by housekeeping activities in all of the process-related buildings. Based on analytical results, these sweepings are characterized as hazardous wastes because they contain Cd (D006B), Cr (D007), Pb (D008B) and/or Se (D010). Metals found in floor sweepings are from maintenance or machining activities. The source for Se is unknown. The waste stream can contain floor sweepings mixed in gloves and mop heads. It can contain PCB's.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	58,351.5	-	58,351.5	-	97,069.0

Treatability Group:

MLLW CH, Heterogeneous Debris, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

The sawdust and oil floor sweeping compound has been eliminated with a procedural modification.

State: Ohio
ID #: 0000002073
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: FLOOR SWEEPINGS
Matrix: Heterogeneous Debris
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D010	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000002074

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: HEPA FILTERS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:

The waste stream is generated by removing the HEPA filters from mercury vacuum cleaners. The vacuum cleaners are used by the field cleaning crew to collect spills of mercury. HEPA filters are contaminated with mercury.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	126.0	-	126.0	-	32,885.0

Treatability Group:

MLLW CH, Heterogeneous Debris, Toxic Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The recycling of mercury that is not radiologically contaminated is under investigation.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D009B	Tech.	Mercury Roast/Retort

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio
ID #: 0000002076
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: METAL SHAVINGS AND SCRAP
Matrix: Inorganic Debris
Waste Type: MLLW

Waste Stream Description and Source:

This waste is generated in the maintenance shops (compressor, machine and valve). The wastes in this group are known on the Part B permit as brass, waste brass turnings and metal shavings and scrap. The waste is characterized as hazardous based on lab analysis, process knowledge and MSDS.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	29,826.5	-	29,826.5	-	18,088.0

Treatability Group:

MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

Metal shavings and scrap that are not radiologically contaminated are segregated and collected as scrap metal.

State: Ohio | ID #: 0000002076

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: METAL SHAVINGS AND SCRAP

Matrix: Inorganic Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio
ID #: 0000002077
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: X-705A INCINERATOR ASH
Matrix: Inorganic Sludges/Particulates
Waste Type: MLLW

Waste Stream Description and Source:

The ash and debris were generated in the closure of the X-705 Incinerator. The ash waste is derived from spent trichloroethylene and is characterized, through process knowledge, as a spent solvent hazardous waste that may contain various toxicity characteristic metals (arsenic, barium, cadmium, chromium, lead, selenium, and silver.)

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	466.0	-	466.0	-	0.000

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Not Applicable.

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State: Ohio | ID #: 0000002077

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: X-705A INCINERATOR ASH

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D010	Conc.	Stabilization
D011	Conc.	Stabilization
F001	Conc.	Incineration

State: Ohio | ID #: 0000002078

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: LAB WASTE

Matrix: Multiple | Waste Type: MLLW

Waste Stream Description and Source:

The waste is generated in the X-705 Building. The process laboratory supports the decontamination building operation by providing uranium analysis at several different stages of the uranium recovery process. This waste is generated from the current U shake-out procedure and an experimental shake-out procedure. The waste from the past U shake-out procedure is being managed as an acidic waste. This waste stream includes aqueous liquid, and organic liquids.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	1,184.0	-	1,184.0	-	4,910.0

Treatability Group:

MLLW CH, Multiple, Toxic Organics

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility. Portions of this waste stream currently do not meet the K-25 Site TSCA Incinerator Waste Acceptance Criteria.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The X-705 Building is scheduled to undergo a process waste assessment in the future.

General Comments:

Category includes both aqueous and organic liquids.

State: Ohio | ID #: 0000002078

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: LAB WASTE

Matrix: Multiple | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D002A	Tech.	Deactivation
F003	Conc.	Incineration

State: Ohio | ID #: 0000002080
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: WASTE ANTIFREEZE
Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
This is a site-wide waste stream generated during routine and preventive maintenance operations. The waste stream is also known as "Antifreeze".

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	8,787.0	-	8,787.0	-	10,054.0

Treatability Group:
MLLW CH, Organic Liquids, Toxic Metals w/o Mercury

Treatment Status:
Plan to treat on-site at the planned X-705 Decontamination Facility.

Technology Status:
Technology exists. No modifications are necessary.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:
The recycling of antifreeze that is not radiologically contaminated is under investigation.

EPA CODES
Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D010	Conc.	Stabilization

State: Ohio | ID #: 0000002081

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: USED LAB CHEMICALS

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is generated site-wide. Laboratory activities are conducted in various locations. The chemicals are routinely depleted but process changes and shelf-life cause them to be wastes. Some are treated at the K-25 Incinerator. This particular waste stream is multi-EPA coded. The Lab Acid Pit waste stream is included (D007, D040, F001, F003). Other waste streams are waste chloradane and formaldehyde.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	340.0	-	340.0	-	900.0

Treatability Group:

MLLW CH, Lab Packs with Metals, Toxic Organics and Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. Some chemicals are being treated at the K-25 Site TSCA Incinerator and the X-705 Microfiltration Facility, as appropriate.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

These labs are scheduled to undergo a process waste assessment in the future.

General Comments:

TREATMENT: Some of the chemicals, based on assay, can go to TSCA Incinerator and X-705 Bldg. CODE BASIS: Medium high confidence level based on MSDS and process knowledge. Waste Code U219 (Thiourea) was not on the EPA Table.

State: Ohio | ID #: 0000002081
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: USED LAB CHEMICALS
Matrix: Lab Packs with Metals | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D002A	Tech.	Deactivation
D003A	Conc.	Chemical Oxidation followed by Alkaline Chlorination
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D009D	Tech.	Amalgamation
D010	Conc.	Stabilization
D011	Conc.	Stabilization
D012	Conc.	Incineration
D013	Conc.	Incineration
D014	Conc.	Incineration
D015	Conc.	Incineration
D016	Conc.	Incineration
D017	Conc.	Incineration
D018		Not currently prohibited under the LDR Program.
D019		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000002081

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: USED LAB CHEMICALS

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D020		Not currently prohibited under the LDR Program.
D021		Not currently prohibited under the LDR Program.
D022		Not currently prohibited under the LDR Program.
D023		Not currently prohibited under the LDR Program.
D024		Not currently prohibited under the LDR Program.
D025		Not currently prohibited under the LDR Program.
D026		Not currently prohibited under the LDR Program.
D027		Not currently prohibited under the LDR Program.
D028		Not currently prohibited under the LDR Program.
D029		Not currently prohibited under the LDR Program.
D030		Not currently prohibited under the LDR Program.
D031		Not currently prohibited under the LDR Program.
D032		Not currently prohibited under the LDR Program.
D033		Not currently prohibited under the LDR Program.
D034		Not currently prohibited under the LDR Program.
D035		Not currently prohibited under the LDR Program.
D036		Not currently prohibited under the LDR Program.
D037		Not currently prohibited under the LDR Program.
D038		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
D041		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000002081

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: USED LAB CHEMICALS

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D042		Not currently prohibited under the LDR Program.
D043		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F002	Conc.	Incineration
F003	Conc.	Incineration
F027	Conc.	Incineration
P001	Tech.	Fuel Substitution; or Incineration
P003	Tech.	Fuel Substitution; or Incineration
P004	Conc.	Incineration
P005	Tech.	Fuel Substitution; or Incineration
P008	Tech.	Incineration
P010	Conc.	Vitrification
P011	Conc.	Vitrification
P012	Conc.	Vitrification
P013	Conc.	Electrolytic Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation; and Stabilization
P015	Tech.	Metals Recovery; or Thermal Recovery of Metals
P016	Tech.	Incineration
P018	Tech.	Incineration
P020	Conc.	Incineration
P021	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P022	Tech.	Incineration

State: Ohio | ID #: 0000002081

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: USED LAB CHEMICALS

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
P023	Tech.	Incineration
P024	Conc.	Incineration
P028	Tech.	Incineration
P029	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P030	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P031	Tech.	Chemical Oxidation; Wet Air Oxidation; OR Incineration
P033	Tech.	Chemical Oxidation; Wet Air Oxidation; OR Incineration
P037	Conc.	Incineration
P038	Conc.	Vitrification
P041	Tech.	Fuel Substitution; or Incineration
P042	Tech.	Incineration
P046	Tech.	Incineration
P047	Conc.	Incineration
P048	Conc.	Incineration
P050	Conc.	Incineration
P051	Conc.	Incineration
P056	Tech.	Adsorption followed by Neutralization
P058	Tech.	Incineration
P059	Conc.	Incineration
P060	Conc.	Incineration

State: Ohio
ID #: 0000002081
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: USED LAB CHEMICALS
Matrix: Lab Packs with Metals
Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
P063	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P064	Tech.	Incineration
P068	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
P070	Tech.	Incineration
P071	Conc.	Incineration
P072	Tech.	Incineration
P074	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation followed by Stabilization
P075	Tech.	Incineration
P076	Tech.	Adsorption
P077	Conc.	Incineration
P078	Tech.	Adsorption
P082	Tech.	Incineration
P087	Tech.	Metals Recovery; or Thermal Recovery of Metals
P089	Conc.	Incineration
P093	Tech.	Incineration
P095	Tech.	Incineration
P098	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P099	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation followed by Stabilization
P104	Conc.	Chemical Oxidation followed by Alkaline

State: Ohio | ID #: 0000002081
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: USED LAB CHEMICALS
Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
		Chlorination followed by Chemical Precipitation followed by Stabilization
P105	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
P106	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P108	Tech.	Incineration
P110	Conc.	Incineration followed by Stabilization
P111	Tech.	Incineration
P113	Tech.	Thermal Recovery of Metals; or Stabilization
P114	Conc.	Stabilization
P115	Tech.	Thermal Recovery of Metals ;or Stabilization
P116	Tech.	Incineration
P119	Tech.	Stabilization
P120	Tech.	Stabilization
P121	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P123	Conc.	Incineration
U001	Tech.	Incineration or Fuel Substitution
U002	Conc.	Incineration
U003	Tech.	Incineration
U004	Conc.	Incineration
U006	Tech.	Incineration
U007	Tech.	Incineration

State: Ohio

ID #: 0000002081

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: USED LAB CHEMICALS

Matrix: Lab Packs with Metals

Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U008	Tech.	Fuel Substitution; or Incineration
U009	Conc.	Incineration
U012	Conc.	Incineration
U017	Tech.	Incineration
U018	Conc.	Incineration
U019	Conc.	Incineration
U020	Tech.	Incineration
U021	Tech.	Incineration
U022	Conc.	Incineration
U023	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
U026	Tech.	Incineration
U028	Conc.	Incineration
U029	Conc.	Incineration
U030	Conc.	Incineration
U031	Conc.	Incineration
U032	Conc.	Chemical Reduction followed by Chemical Precipitation
U033	Tech.	Incineration
U034	Tech.	Incineration
U036	Conc.	Incineration
U037	Conc.	Incineration
U039	Conc.	Incineration

State: Ohio | ID #: 0000002081

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: USED LAB CHEMICALS

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U041	Tech.	Incineration
U042	Tech.	Incineration
U043	Conc.	Incineration
U044	Conc.	Incineration
U045	Conc.	Incineration
U046	Tech.	Incineration
U047	Conc.	Incineration
U048	Conc.	Incineration
U050	Conc.	Incineration
U051	Conc.	Incineration
U052	Conc.	Incineration
U055	Tech.	Fuel Substitution; or Incineration
U056	Tech.	Fuel Substitution; or Incineration
U057	Tech.	Fuel Substitution; or Incineration
U060	Conc.	Incineration
U061	Conc.	Incineration
U063	Conc.	Incineration
U064	Tech.	Fuel Substitution; or Incineration
U066	Conc.	Incineration
U067	Conc.	Incineration
U068	Conc.	Incineration
U069	Conc.	Incineration

State: Ohio | ID #: 0000002081

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: USED LAB CHEMICALS

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U070	Conc.	Incineration
U071	Conc.	Incineration
U072	Conc.	Incineration
U073	Tech.	Incineration
U074	Tech.	Incineration
U075	Conc.	Incineration
U076	Conc.	Incineration
U077	Conc.	Incineration
U078	Conc.	Incineration
U079	Conc.	Incineration
U080	Conc.	Incineration
U081	Conc.	Incineration
U082	Conc.	Incineration
U083	Conc.	Incineration
U084	Conc.	Incineration
U086	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
U088	Conc.	Incineration
U092	Tech.	Incineration
U094	Tech.	Fuel Substitution; or Incineration
U096	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
U101	Conc.	Incineration

State: Ohio | ID #: 0000002081

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: USED LAB CHEMICALS

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U102	Conc.	Incineration
U105	Conc.	Incineration
U106	Conc.	Incineration
U107	Conc.	Incineration
U108	Conc.	Incineration
U109	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
U110	Tech.	Incineration
U112	Conc.	Incineration
U113	Tech.	Fuel Substitution; or Incineration
U117	Conc.	Incineration
U118	Conc.	Incineration
U120	Conc.	Incineration
U121	Conc.	Incineration
U122	Tech.	Fuel Substitution; or Incineration
U123	Tech.	Fuel Substitution; or Incineration
U126	Tech.	Fuel Substitution; or Incineration
U127	Conc.	Incineration
U128	Conc.	Incineration
U129	Conc.	Incineration
U130	Conc.	Incineration
U131	Conc.	Incineration
U133	Tech.	Fuel Substitution; Chemical Oxidation; Chemical

State: Ohio
ID #: 0000002081
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: USED LAB CHEMICALS
Matrix: Lab Packs with Metals
Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
		Reduction; or Incineration
U134	Tech.	Adsorption followed by Neutralization; or Neutralization
U135	Tech.	Chemical Oxidation; Chemical Reduction; or Incineration
U137	Conc.	Incineration
U138	Conc.	Incineration
U140	Conc.	Incineration
U141	Conc.	Incineration
U142	Conc.	Stabilization; or Incineration
U144	Conc.	Incineration followed by Stabilization
U145	Conc.	Stabilization
U146	Conc.	Incineration followed by Stabilization
U147	Tech.	Fuel Substitution; or Incineration
U149	Tech.	Incineration
U150	Tech.	Incineration
U151	Tech.	Amalgamation
U152	Conc.	Incineration
U153	Tech.	Incineration
U154	Tech.	Fuel Substitution; or Incineration
U159	Conc.	Incineration
U160	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
U161	Conc.	Incineration

State: Ohio | ID #: 0000002081

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: USED LAB CHEMICALS

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U162	Conc.	Incineration
U165	Conc.	Incineration
U169	Conc.	Incineration
U170	Conc.	Incineration
U171	Tech.	Incineration
U182	Tech.	Fuel Substitution; or Incineration
U183	Conc.	Incineration
U184	Tech.	Incineration
U185	Conc.	Incineration
U188	Conc.	Incineration
U190	Conc.	Incineration; or Fuel Substitution
U196	Conc.	Incineration
U197	Tech.	Fuel Substitution; or Incineration
U201	Tech.	Fuel Substitution; or Incineration
U202	Tech.	Incineration
U204	Conc.	Stabilization
U205	Conc.	Stabilization
U207	Conc.	Incineration
U208	Conc.	Incineration
U209	Conc.	Incineration
U210	Conc.	Incineration
U211	Conc.	Incineration

State: Ohio
ID #: 0000002081
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: USED LAB CHEMICALS
Matrix: Lab Packs with Metals
Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U213	Tech.	Fuel Substitution; or Incineration
U214	Tech.	Thermal Recovery of Metals; or Stabilization
U215	Tech.	Thermal Recovery of Metals; or Stabilization
U216	Tech.	Thermal Recovery of Metals; or Stabilization
U217	Tech.	Thermal Recovery of Metals; or Stabilization
U218	Tech.	Incineration
U219	Tech.	Incineration
U220	Conc.	Incineration
U223	Tech.	Fuel Substitution; or Incineration
U225	Conc.	Incineration
U226	Conc.	Incineration
U227	Conc.	Incineration
U228	Conc.	Incineration
U234	Tech.	Incineration
U235	Conc.	Incineration
U236	Tech.	Incineration
U238	Tech.	Incineration
U239	Conc.	Incineration
U240	Tech.	Incineration
U243	Conc.	Incineration
U246	Tech.	Chemical Oxidation; Wet Air Oxidation; or Incineration
U247	Conc.	Incineration

State: Ohio ID #: 0000002081

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: USED LAB CHEMICALS

Matrix: Lab Packs with Metals Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U248	Tech.	Fuel Substitution; or Incineration
U328	Tech.	Incineration; or Thermal Destruction
U353	Tech.	Incineration; or Thermal Destruction
U359	Tech.	Incineration; or Fuel Substitution

The alternate LDR treatment standards for labpacks is incineration as a method of treatment and a requirement for the incinerator residues to meet the treatment standards for the TC toxic metals (i.e., D004-D008, and D010-D011).

State: Ohio | ID #: 0000002082

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Stream Description and Source:

Due to the nature of the laboratory activities conducted in various locations at PORTS, a large number of small containers of chemicals are required for testing and formulation. These chemicals are routinely depleted, but occasionally they must be considered waste due to process changes or to chemicals being stocked past their shelf lives. Waste unused laboratory chemicals are characterized as hazardous wastes through process knowledge according to the nature of the constituents identified on the containers or MSDS's.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	2,477.0	-	2,477.0	-	909.0

Treatability Group:

MLLW CH, Lab Packs with Metals, Toxic Organics and Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

A request has been made to obtain a minimum sampling size requirement for each individual analysis from the lab. Waste Code U219 (Thiourea) is not in the EPA Table.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D002A	Tech.	Deactivation

State: Ohio | ID #: 0000002082

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D003A	Conc.	Chemical Oxidation followed by Alkaline Chlorination
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D009D	Tech.	Amalgamation
D010	Conc.	Stabilization
D011	Conc.	Stabilization
D012	Conc.	Incineration
D013	Conc.	Incineration
D014	Conc.	Incineration
D015	Conc.	Incineration
D016	Conc.	Incineration
D017	Conc.	Incineration
D018		Not currently prohibited under the LDR Program.
D019		Not currently prohibited under the LDR Program.
D020		Not currently prohibited under the LDR Program.
D021		Not currently prohibited under the LDR Program.
D022		Not currently prohibited under the LDR Program.
D023		Not currently prohibited under the LDR Program.
D024		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000002082

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D025		Not currently prohibited under the LDR Program.
D026		Not currently prohibited under the LDR Program.
D027		Not currently prohibited under the LDR Program.
D028		Not currently prohibited under the LDR Program.
D029		Not currently prohibited under the LDR Program.
D030		Not currently prohibited under the LDR Program.
D031		Not currently prohibited under the LDR Program.
D032		Not currently prohibited under the LDR Program.
D033		Not currently prohibited under the LDR Program.
D034		Not currently prohibited under the LDR Program.
D035		Not currently prohibited under the LDR Program.
D036		Not currently prohibited under the LDR Program.
D037		Not currently prohibited under the LDR Program.
D038		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
D041		Not currently prohibited under the LDR Program.
D042		Not currently prohibited under the LDR Program.
D043		Not currently prohibited under the LDR Program.
F027	Conc.	Incineration
P001	Tech.	Fuel Substitution; or Incineration
P003	Tech.	Fuel Substitution; or Incineration

State: Ohio ID #: 0000002082

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)

Matrix: Lab Packs with Metals Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
P004	Conc.	Incineration
P005	Tech.	Fuel Substitution; or Incineration
P008	Tech.	Incineration
P010	Conc.	Vitrification
P011	Conc.	Vitrification
P012	Conc.	Vitrification
P013	Conc.	Electrolytic Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation; and Stabilization
P015	Tech.	Metals Recovery; or Thermal Recovery of Metals
P016	Tech.	Incineration
P018	Tech.	Incineration
P020	Conc.	Incineration
P021	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P022	Tech.	Incineration
P023	Tech.	Incineration
P024	Conc.	Incineration
P028	Tech.	Incineration
P029	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P030	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P031	Tech.	Chemical Oxidation; Wet Air Oxidation; OR Incineration

State: Ohio | ID #: 0000002082

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
P033	Tech.	Chemical Oxidation; Wet Air Oxidation; OR Incineration
P037	Conc.	Incineration
P038	Conc.	Vitrification
P041	Tech.	Fuel Substitution; or Incineration
P042	Tech.	Incineration
P046	Tech.	Incineration
P047	Conc.	Incineration
P048	Conc.	Incineration
P050	Conc.	Incineration
P051	Conc.	Incineration
P056	Tech.	Adsorption followed by Neutralization
P058	Tech.	Incineration
P059	Conc.	Incineration
P060	Conc.	Incineration
P063	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P064	Tech.	Incineration
P068	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
P070	Tech.	Incineration
P071	Conc.	Incineration
P072	Tech.	Incineration
P074	Conc.	Chemical Oxidation followed by Alkaline

State: Ohio | ID #: 0000002082

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
		Chlorination followed by Chemical Precipitation followed by Stabilization
P075	Tech.	Incineration
P076	Tech.	Adsorption
P077	Conc.	Incineration
P078	Tech.	Adsorption
P082	Tech.	Incineration
P087	Tech.	Metals Recovery; or Thermal Recovery of Metals
P089	Conc.	Incineration
P093	Tech.	Incineration
P095	Tech.	Incineration
P098	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P099	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation followed by Stabilization
P104	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation followed by Stabilization
P105	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
P106	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P108	Tech.	Incineration
P110	Conc.	Incineration followed by Stabilization
P111	Tech.	Incineration

State: Ohio | ID #: 0000002082

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
P113	Tech.	Thermal Recovery of Metals; or Stabilization
P114	Conc.	Stabilization
P115	Tech.	Thermal Recovery of Metals ;or Stabilization
P116	Tech.	Incineration
P119	Tech.	Stabilization
P120	Tech.	Stabilization
P121	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P123	Conc.	Incineration
U001	Tech.	Incineration or Fuel Substitution
U002	Conc.	Incineration
U003	Tech.	Incineration
U004	Conc.	Incineration
U006	Tech.	Incineration
U007	Tech.	Incineration
U008	Tech.	Fuel Substitution; or Incineration
U009	Conc.	Incineration
U012	Conc.	Incineration
U017	Tech.	Incineration
U018	Conc.	Incineration
U019	Conc.	Incineration
U020	Tech.	Incineration
U021	Tech.	Incineration

State: Ohio ID #: 0000002082
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)
Matrix: Lab Packs with Metals Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U022	Conc.	Incineration
U023	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
U026	Tech.	Incineration
U028	Conc.	Incineration
U029	Conc.	Incineration
U030	Conc.	Incineration
U031	Conc.	Incineration
U032	Conc.	Chemical Reduction followed by Chemical Precipitation
U033	Tech.	Incineration
U034	Tech.	Incineration
U036	Conc.	Incineration
U037	Conc.	Incineration
U039	Conc.	Incineration
U041	Tech.	Incineration
U042	Tech.	Incineration
U043	Conc.	Incineration
U044	Conc.	Incineration
U045	Conc.	Incineration
U046	Tech.	Incineration
U047	Conc.	Incineration
U048	Conc.	Incineration

State: Ohio | ID #: 0000002082

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U050	Conc.	Incineration
U051	Conc.	Incineration
U052	Conc.	Incineration
U055	Tech.	Fuel Substitution; or Incineration
U056	Tech.	Fuel Substitution; or Incineration
U057	Tech.	Fuel Substitution; or Incineration
U060	Conc.	Incineration
U061	Conc.	Incineration
U063	Conc.	Incineration
U064	Tech.	Fuel Substitution; or Incineration
U066	Conc.	Incineration
U067	Conc.	Incineration
U068	Conc.	Incineration
U069	Conc.	Incineration
U070	Conc.	Incineration
U071	Conc.	Incineration
U072	Conc.	Incineration
U073	Tech.	Incineration
U074	Tech.	Incineration
U075	Conc.	Incineration
U076	Conc.	Incineration
U077	Conc.	Incineration

State: Ohio | ID #: 0000002082

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U078	Conc.	Incineration
U079	Conc.	Incineration
U080	Conc.	Incineration
U081	Conc.	Incineration
U082	Conc.	Incineration
U083	Conc.	Incineration
U084	Conc.	Incineration
U086	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
U088	Conc.	Incineration
U092	Tech.	Incineration
U094	Tech.	Fuel Substitution; or Incineration
U096	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
U101	Conc.	Incineration
U102	Conc.	Incineration
U105	Conc.	Incineration
U106	Conc.	Incineration
U107	Conc.	Incineration
U108	Conc.	Incineration
U109	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
U110	Tech.	Incineration
U112	Conc.	Incineration

State: Ohio | ID #: 0000002082

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U113	Tech.	Fuel Substitution; or Incineration
U117	Conc.	Incineration
U118	Conc.	Incineration
U120	Conc.	Incineration
U121	Conc.	Incineration
U122	Tech.	Fuel Substitution; or Incineration
U123	Tech.	Fuel Substitution; or Incineration
U126	Tech.	Fuel Substitution; or Incineration
U127	Conc.	Incineration
U128	Conc.	Incineration
U129	Conc.	Incineration
U130	Conc.	Incineration
U131	Conc.	Incineration
U133	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
U134	Tech.	Adsorption followed by Neutralization; or Neutralization
U135	Tech.	Chemical Oxidation; Chemical Reduction; or Incineration
U137	Conc.	Incineration
U138	Conc.	Incineration
U140	Conc.	Incineration
U141	Conc.	Incineration
U142	Conc.	Stabilization; or Incineration

State: Ohio | ID #: 0000002082

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U144	Conc.	Incineration followed by Stabilization
U145	Conc.	Stabilization
U146	Conc.	Incineration followed by Stabilization
U147	Tech.	Fuel Substitution; or Incineration
U149	Tech.	Incineration
U150	Tech.	Incineration
U151	Tech.	Amalgamation
U152	Conc.	Incineration
U153	Tech.	Incineration
U154	Tech.	Fuel Substitution; or Incineration
U159	Conc.	Incineration
U160	Tech.	Fuel Substitution; Chemical Oxidation; Chemical Reduction; or Incineration
U161	Conc.	Incineration
U162	Conc.	Incineration
U165	Conc.	Incineration
U169	Conc.	Incineration
U170	Conc.	Incineration
U171	Tech.	Incineration
U182	Tech.	Fuel Substitution; or Incineration
U183	Conc.	Incineration
U184	Tech.	Incineration
U185	Conc.	Incineration

State: Ohio | ID #: 0000002082
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)
Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U188	Conc.	Incineration
U190	Conc.	Incineration; or Fuel Substitution
U196	Conc.	Incineration
U197	Tech.	Fuel Substitution; or Incineration
U201	Tech.	Fuel Substitution; or Incineration
U202	Tech.	Incineration
U204	Conc.	Stabilization
U205	Conc.	Stabilization
U207	Conc.	Incineration
U208	Conc.	Incineration
U209	Conc.	Incineration
U210	Conc.	Incineration
U211	Conc.	Incineration
U213	Tech.	Fuel Substitution; or Incineration
U214	Tech.	Thermal Recovery of Metals; or Stabilization
U215	Tech.	Thermal Recovery of Metals; or Stabilization
U216	Tech.	Thermal Recovery of Metals; or Stabilization
U217	Tech.	Thermal Recovery of Metals; or Stabilization
U218	Tech.	Incineration
U220	Conc.	Incineration
U223	Tech.	Fuel Substitution; or Incineration
U225	Conc.	Incineration

State: Ohio | ID #: 0000002082

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: UNUSED LABORATORY CHEMICALS (SOLID)

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U226	Conc.	Incineration
U227	Conc.	Incineration
U228	Conc.	Incineration
U234	Tech.	Incineration
U235	Conc.	Incineration
U236	Tech.	Incineration
U238	Tech.	Incineration
U239	Conc.	Incineration
U240	Tech.	Incineration
U243	Conc.	Incineration
U246	Tech.	Chemical Oxidation; Wet Air Oxidation; or Incineration
U247	Conc.	Incineration
U248	Tech.	Fuel Substitution; or Incineration
U328	Tech.	Incineration; or Thermal Destruction
U353	Tech.	Incineration; or Thermal Destruction
U359	Tech.	Incineration; or Fuel Substitution

The alternate LDR treatment standards for labpacks is incineration as a method of treatment and a requirement for the incinerator residues to meet the treatment standards for the TC toxic metals (i.e., D004-D008, and D010-D011).

State: Ohio | ID #: 0000010056

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: PAINT SLUDGE AND SOLIDS

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Waste paint sludge and solids are generated from cleaning out water-based spray booths. Included in this stream is the "spill-cleanup stream," which is waste generated from a construction paint spill. EPA codes for paint sludge and solids are D006B, D007, D035, and D008B. The code for spill clean-up is D007 and F003.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	3,280.0	-	3,280.0	-	1,932.0

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The paint shop is in the process of changing its inventory to latex based paints.

State: Ohio | ID #: 0000010056

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: PAINT SLUDGE AND SOLIDS

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D035		Not currently prohibited under the LDR Program.
F003	Conc.	Incineration

State: Ohio | ID #: 0000010057
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: BATTERIES
Matrix: Batteries (lead acid, cadmium) | Waste Type: MLLW

Waste Stream Description and Source:
This is a site-wide waste stream. Operations at PORTS involve the use of lead-acid, gel cell, and nickel-cadmium batteries in a variety of applications.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	7,620.0	-	7,620.0	-	18,189.0

Treatability Group:
MLLW CH, Batteries (lead acid, cadmium), Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:
The off-site recycling of batteries, especially Lead-acid batteries is pending release under the current DOE/MMES moratorium on off-site shipments.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002C	Tech.	Deactivation
D006A	Tech.	Thermal Recovery of Metals
D008A	Tech.	Secondary Lead Smelting

State: Ohio	ID #: 0000010058
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: LEAD SOLUTIONS	
Matrix: Aqueous Liquid	Waste Type: MLLW

Waste Stream Description and Source:
The waste stream is generated in the clean-up of the plant firing range.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	445.0	-	445.0	-	283.0

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:
Plan to treat on-site at the existing X-705 Decontamination Facility.

Technology Status:
Technology exists. No modifications are necessary.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:
Will undergo assessment.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

State: Ohio | ID #: 0000010059

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: OIL AND GREASE REMOVAL UNIT FILTER CAKE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

The stream is generated in the X-705 Bldg. Small parts are degreased with NaOH or soap solution. The resulting solution is processed through the oil and grease removal unit where the grease is removed as a filter cake.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	3,920.0	-	3,920.0	-	10,700.0

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This system is scheduled to undergo a process waste assessment in the future.

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State: Ohio | ID #: 0000010059

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: OIL AND GREASE REMOVAL UNIT FILTER CAKE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000010060
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: SEAL DISMANTLING SCRAP METAL
Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
Seals are disassembled with a radio frequency heater to facilitate cleaning. The waste stream is in the X-705 Bldg. Scrap metal from this activity includes bellows and solder.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	1,075.0	-	1,075.0	-	2,087.0

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:

The X-705 Building is scheduled to undergo a process waste assessment in the future.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010061

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: MACHINE GRINDING SLUDGE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Waste is in the collection basin of the grinders.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	410.0	-	410.0	-	1,025.0

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:

The building which contains the grinders will undergo a process assessment in the future

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization

State: Ohio | ID #: 0000010062

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: PPE AND MISC DEBRIS

Matrix: Organic Debris | Waste Type: MLLW

Waste Stream Description and Source:

Personal Protective Equipment (PPE) and other similar debris that was in contact with soil and water during RCRA Facility Investigation and closure activities.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	129,111.0	-	129,111.0	-	14,508.0

Treatability Group:

MLLW CH, Organic Debris, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

General Comments:

CODE BASIS: Medium high confidence level based on process knowledge. No sampling results are available.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio	ID #: 0000010062
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: PPE AND MISC DEBRIS	
Matrix: Organic Debris	Waste Type: MLLW

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010063

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: SOILS

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:

Environmental Restoration activities generate soil as a result of investigation and clean-up work. Soils contain low levels of TCE, TCA, and other halogenated solvents.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	4,506,787.0	-	4,506,787.0	-	166,616.0

Treatability Group:

MLLW CH, Soils, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time. Several treatment technologies, including peroxidation and thermal vapor extraction, are being investigated for this waste. Waste may be treated in situ.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

General Comments:

CODE BASIS: High level of confidence for determining the EPA code.

State: Ohio | ID #: 0000010063

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: SOILS

Matrix: Soils | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio | ID #: 0000010064
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: ACETONE STILL BOTTOMS/SOLVENTS
Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
This waste was generated in the X-760 Chemical Engineering Facility from a pilot scale study.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	102.0	-	102.0	-	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:
Currently being treated off-site at the K-25 Site TSCA Incinerator facility. Portions of this waste stream currently do not meet the K-25 Site TSCA Incinerator Waste Acceptance Criteria.

Technology Status:
Technology exists. No modifications are necessary.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:

Waste is no longer generated.

State: Ohio | ID #: 0000010064

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: ACETONE STILL BOTTOMS/SOLVENTS

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
F003	Conc.	Incineration

State: Ohio | ID #: 0000010065
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: FUELS OR OIL/WATER
Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

Waste fuels or oil with water are generated from field activities involving the draining of diked fuel storage areas after inclement weather. The water is containerized if a visible sheen is apparent on its surface.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	727.0	-	727.0	-	5,895.0

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility. Portions of this waste stream currently do not meet the K-25 Site TSCA Incinerator Waste Acceptance Criteria.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The acitvities that generate this waste stream are scheduled to undergo a process waste assessment in the future.

State: Ohio | ID #: 0000010065
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: FUELS OR OIL/WATER
Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000010067

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: FLOURINE GENERATOR SLUDGE AND SOLUTION

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Spent liquid and sludge from the flourine generator. Sludge results from lime neutralizing the spent waste liquids. Arsenic was found in the liquid and the sludge. The liquid waste is also characterized as corrosive through process knowledge and is considered acidic.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	16,456.0	-	16,456.0	-	13,161.0

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This system is scheduled to undergo a process waste assessment in the future.

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002A	Tech.	Deactivation
D004	Conc.	Vitrification

State: Ohio | ID #: 0000010068

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: FILTER TANK GUNK

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

Uranium bearing solutions are filtered through a diatomaceous earth medium to remove suspended solids. The resultant filter cake gunk is characterized as hazardous because analysis indicated mercury.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	10,397.0	-	10,397.0	-	662.0

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This system is scheduled to undergo a process waste assessment in the future.

State: Ohio | ID #: 0000010068

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: FILTER TANK GUNK

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
D009B	Tech.	Mercury Roast/Retort

State: Ohio | ID #: 0000010069

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: BOOTH WATER

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is aqueous waste water generated in the Paint Shop.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	16,142.0	-	16,142.0	-	27,043.0

Treatability Group:

MLLW CH, Aqueous Liquid, Toxic Organics and Metals w/o Mercury

Treatment Status:

Plan to treat on-site at the existing X-705 Decontamination Facility.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The paint shop spray booth will be replaced with a booth that uses a dry filtering system. This project is being reviewed by Engineering.

State: Ohio | ID #: 0000010069

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: BOOTH WATER

Matrix: Aqueous Liquid | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D035		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000010071

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: WASTE OIL/FILTERS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is generated in many areas. Maintenance operations on the equipment in the cascade, water treatment facility, garage, and at the landfill will generate waste oil and filters.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	6,533.0	-	6,533.0	-	18,863.0

Treatability Group:

MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

Oil filters are currently being drained and crushed which eliminates them as RCRA Hazardous Waste. Waste oil is being investigated for both on and off-site recycling.

State: Ohio | ID #: 0000010071
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: WASTE OIL/FILTERS
Matrix: Heterogeneous Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010072

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: COOLING TOWER CURTAINS

Matrix: Organic Debris | Waste Type: MLLW

Waste Stream Description and Source:

To improve the efficiency of the cooling towers during adverse weather conditions, large canvas curtains are placed on the towers. These curtains are periodically discarded.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	2,794.0	-	2,794.0	-	544.0

Treatability Group:

MLLW CH, Organic Debris, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

A phosphate corrosion inhibitor has replaced the chromium inhibitor used in the RCW system, which will prolong the useful life of the curtains.

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010074

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: NON-LAB OFF SPEC CHEMICALS

Matrix: Lab Packs with Metals | Waste Type: MLLW

Waste Stream Description and Source:

A variety of chemicals are used in production and support operations at PORTS. Aside from the wastes generated from the use of these chemicals that are described elsewhere in this text, these chemicals also sometimes become wastes in unused form. Waste unused chemicals are generated as result of process changes or expiration of shelf life. Unused chemicals are characterized as hazardous wastes based on process knowledge according to the nature of the constituents as indicated on container labels and markings as well as MSDS information.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	23,294.0	-	23,294.0	-	102,058.0

Treatability Group:

MLLW CH, Lab Packs with Metals, Toxic Organics and Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The use of these chemicals by other departments on site is investigated prior to disposal.

General Comments:

CODE BASIS: Multicode waste stream.

State: Ohio | ID #: 0000010074
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: NON-LAB OFF SPEC CHEMICALS
Matrix: Lab Packs with Metals | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D009D	Tech.	Amalgamation
D010	Conc.	Stabilization
D011	Conc.	Stabilization
D012	Conc.	Incineration
D013	Conc.	Incineration
D014	Conc.	Incineration
D015	Conc.	Incineration
D018		Not currently prohibited under the LDR Program.
D019		Not currently prohibited under the LDR Program.
D020		Not currently prohibited under the LDR Program.
D021		Not currently prohibited under the LDR Program.
D022		Not currently prohibited under the LDR Program.
D026		Not currently prohibited under the LDR Program.
D027		Not currently prohibited under the LDR Program.

State: Ohio
ID #: 0000010074
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: NON-LAB OFF SPEC CHEMICALS
Matrix: Lab Packs with Metals
Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D028		Not currently prohibited under the LDR Program.
D029		Not currently prohibited under the LDR Program.
D030		Not currently prohibited under the LDR Program.
D031		Not currently prohibited under the LDR Program.
D032		Not currently prohibited under the LDR Program.
D033		Not currently prohibited under the LDR Program.
D034		Not currently prohibited under the LDR Program.
D035		Not currently prohibited under the LDR Program.
D036		Not currently prohibited under the LDR Program.
D038		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
D043		Not currently prohibited under the LDR Program.
P029	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P056	Tech.	Adsorption followed by Neutralization
P063	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation
P104	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation followed by Stabilization
P108	Tech.	Incineration
U019	Conc.	Incineration
U036	Conc.	Incineration

State: Ohio ID #: 0000010074

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: NON-LAB OFF SPEC CHEMICALS

Matrix: Lab Packs with Metals Waste Type: MLLW

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
U069	Conc.	Incineration
U077	Conc.	Incineration
U134	Tech.	Adsorption followed by Neutralization; or Neutralization
U151	Tech.	Amalgamation
U159	Conc.	Incineration
U211	Conc.	Incineration
U220	Conc.	Incineration
U226	Conc.	Incineration
U228	Conc.	Incineration
U239	Conc.	Incineration
U240	Tech.	Incineration

The alternate LDR treatment standards for labpacks is incineration as a method of treatment and a requirement for the incinerator residues to meet the treatment standards for the TC toxic metals (i.e., D004-D008, and D010-D011).

State: Ohio | ID #: 0000010075

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: GAS ANALYZER SOLUTIONS

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

Process vent gas analyzers are used to monitor U content in production equipment exhaust gases. These analyzers generate spent indicator solutions that contain ethanol and acidic liquids and are characterized as corrosive hazardous waste based on analysis and ignitable based on process knowledge.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	12,444.0	-	12,444.0	-	6,783.0

Treatability Group:

MLLW CH, Organic Liquids

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility. Portions of this waste stream currently do not meet the K-25 Site TSCA Incinerator Waste Acceptance Criteria.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The process buildings are scheduled to undergo a process waste assessment in the future. Gas analyzers may be replaced.

General Comments:

Stream was also known as spent vent sampling solutions, Arsenazo, Brom-Padap. Plans to replace the gas analyzers. Less waste will be generated. This explains the low five year estimate.

State: Ohio | ID #: 0000010075

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: GAS ANALYZER SOLUTIONS

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
D002A	Tech.	Deactivation

State: Ohio | ID #: 0000010077

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: SILVER PLATING COMPOUNDS

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is generated in the hydrostatic test shop. Tubing and instrument lines are attached to the item being tested. A silver plating compound is used. Also contains silver solder.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	26.0	-	26.0	-	65.0

Treatability Group:

MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This system is scheduled to undergo a process waste assessment in the future.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D011	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

4693

State: Ohio | ID #: 0000010078

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: GROUNDWATER AND RELATED WATER

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:

This is a site-wide waste stream. Environmental Restoration activities result in groundwater, excess sample water and decontamination water. These wastewaters are stored as hazardous wastes based on analysis.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	21,817.0	-	21,817.0	-	83,915.0

Treatability Group:

MLLW CH, Aqueous Liquid, Toxic Organics

Treatment Status:

Currently being treated on-site at the X-701E Groundwater Treatment Facility. Portions of this waste stream are also treated at the X-622 and X-624 Groundwater Treatment Facilities.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

New innovative treatment technologies are under investigation for new Environmental Restoration activities.

General Comments:

CODE BASIS: Sampling results indicate 1,1,1 - Trichloroethane as well as trichloroethylene. TOC can be greater than 1%.

State: Ohio | ID #: 0000010078

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: GROUNDWATER AND RELATED WATER

Matrix: Aqueous Liquid | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio | ID #: 0000010079

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: FILM/MICROFILM/X-RAY

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
This is a site-wide stream generated in the X-100, X-801, X-101, and X-326 buildings.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	2,056.5	-	2,056.5	-	9,271.3

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:

These areas will undergo a process waste assessment in the future.

General Comments:
Waste categories - film, microfilm, x-ray.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D011	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical,

State: Ohio	ID #: 0000010079
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: FILM/MICROFILM/X-RAY	
Matrix: Heterogeneous Debris	Waste Type: MLLW

or thermal), macro/microencapsulation or sealing.

4693

State: Ohio | ID #: 0000010080

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: RAGS, GLOVES, WIPES, ABSORBENT MATERIAL,

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:

This is a site-wide waste stream. Operations at PORTS involve the use of rags, gloves, wipes, absorbent materials, PPE, disposable lab equipment, etc. The materials are used in general cleaning, spill clean-up and various maintenance activities.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	56,837.8	-	56,837.8	-	86,505.0

Treatability Group:

MLLW CH, Heterogeneous Debris, Toxic Organics and Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

Many RCRA hazardous solvents are being substituted with nonhazardous products. This generates less rags, wipes, etc. Also, cleaning techniques are being modified to replace vapor degreasers. These new techniques will also generate less RCRA hazardous rag, wipes.

State: Ohio | ID #: 0000010080
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: RAGS, GLOVES, WIPES, ABSORBENT MATERIAL,
Matrix: Heterogeneous Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D009B	Tech.	Mercury Roast/Retort
D011	Conc.	Stabilization
F001	Conc.	Incineration
F002	Conc.	Incineration
F004	Conc.	Incineration
F005A	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010081

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: WASTE ACID/BASES

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:

A variety of waste acids and bases (including hydrochloric, sulfuric, phosporic, and nitric acids and sodium hydroxide) are generated in the X-710 facilities. Based on analysis, the wastes contain cadmium (D006B) and chromium (D007) and, through process knowledge and MSDS information, these wastes are characterized as corrosive (D002A or D002B) hazardous wastes that may contain arsenic (D004), barium (D005), lead (D008B), mercury (D009D), selenium (D010), and silver (D011).

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	3,943.0	-	3,943.0	-	12,409.0

Treatability Group:

MLLW CH, Aqueous Liquid, Toxic Metals w/ Mercury

Treatment Status:

Currently being treated on-site at the X-705 Decontamination Facility.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

Waste acid/bases are generated primarily in the X-710 Lab. This lab will undergo a process waste assessment in the future.

State: Ohio | ID #: 0000010081

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: WASTE ACID/BASES

Matrix: Aqueous Liquid | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D002B	Tech.	Deactivation
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration
D010	Conc.	Stabilization
D011	Conc.	Stabilization

State: Ohio | ID #: 0000010082

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: OIL TEST SOLUTION

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

This stream is generated in the X-720 Test Shop during the analysis of oil samples from the switch yard.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	2,417.0	-	2,417.0	-	2,761.0

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:

Currently being treated on-site at the X-705 Decontamination Facility.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The X-720 Test Shop is scheduled to undergo a process waste assessment in the future.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F005A	Conc.	Incineration

State: Ohio | ID #: 0000010083

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: DECONTAMINATION WASTE SOLUTIONS

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:

Decontamination of equipment, which is required prior to maintenance activities, generates aqueous waste solutions. These waste solutions are characterized as hazardous wastes based on analysis that found that the solutions may contain chromium (D007) and lead (D008B). Based on process knowledge and MSDS information, the solutions may be acidic or basic (D002), and may contain: arsenic (D004), barium (D005), cadium (D006B), mercury (D009D), selenium (D010), silver (D011), and benzene-bearing oils (D018).

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	7,927.0	-	7,927.0	-	7,375.0

Treatability Group:

MLLW CH, Aqueous Liquid, Toxic Organics and Metals w/ Mercury

Treatment Status:

Currently being treated on-site at the X-705 Decontamination Facility.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This system is scheduled to undergo a process waste assessment in the future.

State: Ohio | ID #: 0000010083

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: DECONTAMINATION WASTE SOLUTIONS

Matrix: Aqueous Liquid | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002A	Tech.	Deactivation
D002B	Tech.	Deactivation
D004	Conc.	Vitrification
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration
D010	Conc.	Stabilization
D011	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 0000010084
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: UF6 ANALYZER STILL BOTTOMS
Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is still bottoms that contain ethanol. In the late 1980's a bench scale study was performed to determine the feasibility of ethanol distillation in uranium-bearing wastes. Waste ethanol used in the study was from the UF6 gas analyzers in the cascade process. The study generated still bottoms that contain ethanol.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	370.0	-	370.0	-	0.000

Treatability Group:

MLLW CH, Organic Liquids, Ignitable, Corrosive, or Reactive Only

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility. Portions of this waste stream currently do not meet the K-25 Site TSCA Incinerator Waste Acceptance Criteria.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation

State: Ohio | ID #: 0000010085

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: SOLVENTS

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is generated site-wide. It includes flammable and halogenated solvent waste streams.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	12,703.6	-	12,703.6	-	15,132.0

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility. Portions of this waste stream currently do not meet the K-25 TSCA Incinerator Waste Acceptance Criteria.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

An aggressive solvent substitution program is underway as part of the current process waste assessment program. Many substitutes have been found, particularly for chlorinated solvents.

State: Ohio | ID #: 0000010085

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: SOLVENTS

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001B	Tech.	Deactivation
F001	Conc.	Incineration
F003	Conc.	Incineration
F005A	Conc.	Incineration

State: Ohio | ID #: 0000010086

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: CARBON SLUDGE

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream was known as spent activated carbon sludge. Activated carbon sludge from carbon filters was generated from groundwater treatment activities. The X-701E is still being operated.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	2,202.0	-	2,202.0	-	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The installation of new carbon filtration units have the ability to extend the life of the carbon media by using a regeneration process.

General Comments:

New units are expected to come on line. This would affect the five year estimate.

State: Ohio
ID #: 0000010086
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: CARBON SLUDGE
Matrix: Organic Sludges/Particulates
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio | ID #: 0000010087

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: BAG FILTERS

Matrix: Organic Debris | Waste Type: MLLW

Waste Stream Description and Source:

This waste is generated in the X-705 building. In-line bag filters are used to remove suspended solids and oils from solutions flowing into the U recovery or microfiltration processes. When plugged, they are discarded.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	206.0	-	206.0	-	206.0

Treatability Group:

MLLW CH, Organic Debris, Toxic Organics and Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The X-705 building will undergo a process waste assessment in the future.

State: Ohio | ID #: 0000010087

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: BAG FILTERS

Matrix: Organic Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration
D018		Not currently prohibited under the LDR Program.

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

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State: Ohio | ID #: 0000010088

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: HAZARDOUS WASTE UNIT CLOSURE

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream will be generated in the future. The waste could contain contaminated equipment, structures, and soils from the closure of three old waste storage areas.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	0.000	-	0.000	-	2,954,791.0

Treatability Group:

MLLW CH, Heterogeneous Debris

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

Waste minimization will be addressed during the development of the closure plans.

General Comments:

CODE BASIS: Multiple codes are anticipated in third thirds and solvents.

EPA CODES

Waste Characterization Basis: Process Knowledge

No applicable RCRA Codes have been identified.

State: Ohio | ID #: 0000010089
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: MERCURY SOLIDS
Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:

Manometers are dismantled and cleaned, and the waste or spilled mercury and mercury contaminated materials are part of this waste stream. In 1989, the #6B well pump mercury seal failed and released mercury into the well. Waste oil, water, sand, and mercury generated from this accident make up the remainder of this waste stream.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	6,120.0	-	6,120.0	-	3,698.0

Treatability Group:

MLLW CH, Inorganic Debris, Toxic Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The recycling of mercury that is not radiologically contaminated is under investigation.

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D009B	Tech.	Mercury Roast/Retort

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical,

State: Ohio	ID #: 0000010089
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: MERCURY SOLIDS	
Matrix: Inorganic Debris	Waste Type: MLLW

or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010090

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: FILTER CLOTH AND PPE

Matrix: Organic Debris | Waste Type: MLLW

Waste Stream Description and Source:

The waste stream is spent treatment filters and PPE from the Liquid Effluent Treatment Facility. The facility's process removed chromium from cooling water by chemical reduction and a precipitation process. The waste stream contains filters from the process and PPE from cleaning up spills. The facility is being phased out due to substitution of a phosphate corrosion inhibitor.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	2,106.0	-	2,106.0	-	445.0

Treatability Group:

MLLW CH, Organic Debris, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

A phosphate corrosion inhibitor has replaced the chromium inhibitor in the RCW system. Waste is no longer generated.

State: Ohio | ID #: 0000010090

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: FILTER CLOTH AND PPE

Matrix: Organic Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D011	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010091

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: CHROMIUM CONTAMINATED SOILS

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is soil and spilled waste sludge, resulting from spills or treatment of cooling water or precipitate sludge from the X-616 Liquid Effluent Treatment Facility. The unit is being phased out, but small amounts of waste will be generated during the next five years as closure continues.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	20,862.0	-	20,862.0	-	0.000

Treatability Group:

MLLW CH, Soils, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

A phosphate corrosion inhibitor has replaced the chromium inhibitor in the RCW system. Waste will no longer be generated once closure is completed.

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization

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State: Ohio | ID #: 0000010092

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: CEMENT DUST

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:

The paint shop may paint and/or seal any on-site building floor. First, the floor must be stripped to remove the previous sealant/paint. PORTS uses a machine called a "Blas-Trac" that not only removes the sealant/paint but also removes small amounts of the concrete floor.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	8,262.0	-	8,262.0	-	7,484.0

Treatability Group:

MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the

State: Ohio	ID #: 0000010092
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: CEMENT DUST	
Matrix: Inorganic Debris	Waste Type: MLLW

following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

4693

State: Ohio | ID #: 0000010093

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: SOLID, LIQUID CLEAN-UP OF STORAGE AREAS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:

Clean-up wastes from closures of three waste storage areas and from future spills in the X-7725 RCRA Storage Facility. This is a future waste stream which involves the wastes resulting from cleaning up spills in three former waste storage areas and in the X-7725 RCRA Waste Storage Facility. The containerized waste is being moved from the three storage areas to the X-7725 building.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	3,970.0	-	3,970.0	-	584.0

Treatability Group:

MLLW CH, Heterogeneous Debris

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

General Comments:

CODE BASIS: No analysis is available. Assume it will be multiple codes.

EPA CODES

Waste Characterization Basis: Process Knowledge

No applicable RCRA Codes have been identified.

State: Ohio | ID #: 0000010094

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: CLEANING AND NEUTRALIZATION TANK RESIDUE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream is generated in the X-700 Bldg. It consists of cleaning tank solution, neutralization pit sludge, and tank residue. Historically, neutralization pit sludge was generated from the cleaning of the neutralization pit that accepts the discharge from the immersion cleaning tanks.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	8,877.0	-	8,877.0	-	15,298.0

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This system is scheduled to undergo a process waste assessment in the future.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

State: Ohio | ID #: 0000010095

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: AEROSOL CANS

Matrix: Compressed Gases | Waste Type: MLLW

Waste Stream Description and Source:

PORTS uses aerosol cans containing various paints, cleaning solutions, oils, and pesticides in numerous applications throughout the plant. Aerosol containers are emptied of their contents to the extent possible and are then managed as solid, non-hazardous waste. Aerosol containers that are off-spec or are damaged, which contain RCRA-regulated constituents, are managed as hazardous waste based upon available MSDS and/or process knowledge.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	789.0	-	789.0	-	472.0

Treatability Group:

MLLW CH, Compressed Gases, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

A program is in place which assures aerosol cans are completely used up prior to disposal.

State: Ohio | ID #: 0000010095

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: AEROSOL CANS

Matrix: Compressed Gases | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001D	Tech.	Deactivation
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization

State: Ohio | ID #: 0000010096

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: CIRCUIT BOARDS AND RELATED ITEMS

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:

This is a site-wide stream. Repair of electrical equipment at Portsmouth frequently generates waste circuit boards and related items.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	1,158.0	-	1,158.0	-	5,502.0

Treatability Group:

MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

Alternative use for this waste will be investigated in the future.

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
D011	Conc.	Stabilization

State: Ohio	ID #: 0000010096
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: CIRCUIT BOARDS AND RELATED ITEMS	
Matrix: Inorganic Debris	Waste Type: MLLW

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010097

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: CLEAN-UP AND SPILL RESPONSE RESIDUES

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:

This is a site-wide waste stream consisting of various types and quantities of routine and emergency cleanup and spill response residues.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	127,074.0	-	127,074.0	-	226,796.0

Treatability Group:

MLLW CH, Heterogeneous Debris

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

Many of the waste streams that generated these spill cleanups have been minimized. This should reduce future cleanup activities.

EPA CODES

Waste Characterization Basis: Sampling/Analysis

No applicable RCRA Codes have been identified.

State: Ohio | ID #: 0000010098

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: GAS CYLINDERS

Matrix: Compressed Gases | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream consists of spent commercial compressed gas cylinders. Hydrogen cyanide cylinders became off-spec during an instrumentation replacement. Other off-spec cylinders contain chlorine trifluoride or acetylene.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	9.1	-	9.1	-	91.0

Treatability Group:

MLLW CH, Compressed Gases

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This system is scheduled to undergo a process waste assessment in the future.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001D	Tech.	Deactivation
P063	Conc.	Chemical Oxidation followed by Alkaline Chlorination followed by Chemical Precipitation

State: Ohio | ID #: 0000010099

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: WASTE OIL AND DEBRIS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream consists of small amounts of oils and debris from the equipment used for ER investigation and cleanup activities.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	605.0	-	605.0	-	1,406.0

Treatability Group:

MLLW CH, Heterogeneous Debris, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

Waste minimization is addressed in the Waste Management Plan for every ER project.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D018		Not currently prohibited under the LDR Program.

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010100
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: CLEAN-UP DEBRIS
Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Waste is generated from cleaning the basement floor and the operating area in the X-700 building.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	1,139.0	-	1,139.0	-	3,384.0

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:

This facility will undergo a process waste assessment in the future. Employees are trained in waste reduction techniques to be used in their jobs during a waste minimization training module.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D040		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical,

State: Ohio	ID #: 0000010100
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: CLEAN-UP DEBRIS	
Matrix: Heterogeneous Debris	Waste Type: MLLW

or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 0000010101

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: STEAM PLANT PPE AND DEBRIS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:

PPE and debris are generated during routine maintenance at the X-600 steam plant. Analysis shows waste is toxic for arsenic.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	476.3	-	476.3	-	379.0

Treatability Group:

MLLW CH, Heterogeneous Debris, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

The use of washable PPE will be expanded as the current laundry facility is upgraded.

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D004	Conc.	Vitrification

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio
ID #: 0000010102
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT
Waste Stream Name: WASTE SODIUM
Matrix: Inorganic Sludges/Particulates
Waste Type: MLLW

Waste Stream Description and Source:
PORTS conducted a pilot-scale treatability study in the early 1980s to assess the feasibility of treating PCBs with sodium metal.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	682.0	-	682.0	-	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:

Waste is no longer generated.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D003D	Tech.	Deactivation

State: Ohio | ID #: 0000010103

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: WASTE SLAG

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:

This stream is waste slag from the silver solder process used to fabricate pigtails.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	95.0	-	95.0	-	286.4

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This waste stream was reviewed during a process waste assessment of the pigtail fabrication process. Potential off-site silver recovery will be investigated.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D011	Conc.	Stabilization

State: Ohio | ID #: 0000010104

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: CYANIDE BEARING SOLUTIONS

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:
Cyanide-containing wastes are generated from analytical laboratory procedures.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	40.4	-	40.4	-	145.0

Treatability Group:
MLLW CH, Organic Liquids, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:

The X-710 laboratory is scheduled to undergo a process waste assessment in the future.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D003A	Conc.	Chemical Oxidation followed by Alkaline Chlorination

State: Ohio | ID #: 0000010105

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: NEAT TCE

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

The off-gas carbon adsorption unit at X-624 is regenerated using. Vapors from this process are condensed to a waste liquid.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	2,810.0	-	2,810.0	-	10,643.5

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:

Plan to treat off-site. The K-25 Site TSCA Incinerator has been identified as the potential facility.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

A process waste assessment is scheduled for this stream.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration

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State: Ohio | ID #: 0000010106

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: DIESEL FUEL, GASOLINE, KEROSENE

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

Site-wide waste stream from 700-6, 720-23, 720-11, and SW-9.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	10,747.0	-	10,747.0	-	10,606.0

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics and Metals w/o Mercury

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility. Portions of this waste stream currently do not meet the K-25 Site TSCA Incinerator Waste Acceptance Criteria.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This waste stream will undergo a process waste assessment in the future.

State: Ohio | ID #: 0000010106

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: DIESEL FUEL, GASOLINE, KEROSENE

Matrix: Organic Liquids | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D018		Not currently prohibited under the LDR Program.

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State: Ohio	ID #: 0000010107
Site: PORTSMOUTH GASEOUS DIFFUSION PLANT	
Waste Stream Name: BLUEPRINT SOLUTIONS	
Matrix: Aqueous Liquid	Waste Type: MLLW

Waste Stream Description and Source:
This waste is aqueous ammonia solution used in the reproduction of engineering blueprints.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	98.4	-	98.4	-	1,399.3

Treatability Group:
MLLW CH, Aqueous Liquid, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Plan to treat on-site at the existing X-705 Decontamination Facility.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:

Alternate uses for this waste will be investigated.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002B	Tech.	Deactivation

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State: Ohio | ID #: 0000010108

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: FLUSHING SOLUTION

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:

This is a site-wide stream. A weak solution of sulfuric acid solution is used to flush the generator cooling system.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	652.0	-	652.0	-	1,390.0

Treatability Group:

MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:

Plan to treat on-site at the existing X-705 Decontamination Facility.

Technology Status:

Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

This waste stream will undergo a process waste assessment.

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D002A	Tech.	Deactivation
D008B	Conc.	Stabilization

State: Ohio | ID #: 0000010109

Site: PORTSMOUTH GASEOUS DIFFUSION PLANT

Waste Stream Name: SILVER SOLUTION

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:
Generated in the hospital during X-ray development.

Current Inventory as of February 28, 1993						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
-	0.000	-	183.0	-	183.0	-	303.9

Treatability Group:
MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:
Plan to treat on-site at the existing X-705 Decontamination Facility.

Technology Status:
Technology exists. Needs modifications or verification for application to DOE waste streams.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Waste Minimization Activities:

A process waste assessment is planned for this stream.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D011	Conc.	Stabilization

23.5 RMI Titanium Company

Site Summary

The RMI Titanium Company extrusion plant is located in northern Ashtabula County, Ohio, approximately 1 mile south of Lake Erie (Figure 23-1). The facility consists of 25 buildings and occupies 7 acres of a 26 acre site. RMI had operated an extrusion press to extrude depleted, normal, and slightly enriched uranium under contract with DOE and its predecessor agencies from 1962 to 1990. Years of handling, extruding, forging, machining, and processing uranium at the RMI facility have resulted in on-site and off-site surface soil contamination, building and equipment contamination, and groundwater contamination. RMI has approximately 16 m^3 of MLLW in storage and projects 1 m^3 of MLLW generated in the next 5 years.

General

Environmental restoration activities include remediation of local groundwater, surface soils, and buildings. The on-site and off-site surface soil is contaminated, and groundwater contains above-background concentrations of uranium. The groundwater investigation and remediation is being completed under RCRA. The remediation of the soils, building, and equipment is being conducted in accordance with the delicensing provisions of the Nuclear Regulatory Commission under 10 CFR Part 40.

23.5.1 Mixed Waste

RMI has approximately 16 m^3 (about 9,100 kg) of stored MLLW from the uranium extrusion process (Table 23.5-1); approximately 5 m^3 (27 percent) are subject to the LDR requirements. Data reflect quantities in storage as of December 31, 1992. All waste at RMI can be contact-handled.

Prior to extrusion, uranium billets were heated in molten salt baths consisting of barium (30 to 60 percent), sodium, and potassium chloride. This process has produced 4 of the 11 inventory waste streams, which are hazardous because of the barium contamination. Remaining waste consists of lead-contaminated lathe oil/water coolant, clay absorbent used to clean up lathe oil/water coolant spills, lead-contaminated pump oil, clay absorbent used to clean up coolant and oil spills, trichloroethylene-contaminated samples from groundwater monitoring wells, spent solvents, cleanup materials (rags and paper), and floor stripper solution. Principal RCRA contaminants are barium and lead; uranium is the radioactive contaminant. All waste is contact-handled and has been characterized by sampling and analysis. Details for individual waste streams may be found in the WPS.

In February 1991, 69 m^3 (63,560 kg) of mixed waste was shipped to a commercial treatment facility in Texas. Due to problems that have developed with the treatment process, the waste may be returned to DOE within the next 5 years. Because this waste is not currently being stored at a DOE site, this volume is not included in the WPS in this report. However, if this waste is stored by a DOE facility, the WPS will be updated to reflect the current status.

23.5.2 Treatment Facilities

The presence of uranium poses no special issues for treatment. The 3 organic liquid waste streams, the cleanup material, and the oil/water coolant are to be treated at the K-25 Site TSCA incinerator at the

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Table 23.5-1
Mixed Wastes at RMI Titanium Company

Waste Type/Matrix	Number of Waste Streams	Inventory		Number of Waste Streams	Five-Year Projection	
		(m^3)	(kg)		(m^3)	(kg)
WASTE TYPE -- MLLW						
CH, Organic Liquids	3	7.29	5,081.20	0	0.00	0.00
CH, Aqueous Liquid	2	1.99	1,637.94	0	0.00	0.00
CH, Organic Debris	1	2.87	570.63	0	0.00	0.00
CH, Inorganic Debris	1	1.77	220.50	1	0.44	54.43
CH, Heterogeneous Debris	2	0.66	589.75	0	0.00	0.00
CH, Other	2	1.33	997.48	2	0.44	385.56
Sub-Total MLLW:	11	15.91	9,097.50	3	0.88	439.99
TOTAL:	11	15.91	9,097.50	3	0.88	439.99

Oak Ridge Reservation. These 5 streams make up about 67 percent of the total stored waste volume. Treatment technologies exist for all remaining wastes; however, no treatment facility has been identified.

23.5.3 Technology Development

There are no site-specific technology development activities for RMI Titanium Company.

23.5.4 Environmental Restoration Program

Environmental restoration activities include remediation of local groundwater, surface soils, buildings, and equipment. The groundwater investigation and remediation is being completed under the Resource Conservation and Recovery Act. The remediation of the soils, building, and equipment is being conducted in accordance with the delicensing provisions of the Nuclear Regulatory Commission under 10 CFR Part 40. It is anticipated that ER activities will generate an additional 16 m^3 of MLLW. Information on contaminated media associated with environmental restoration activities is in Chapter 2.

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WASTE

PROFILE

SHEETS

RMI Titanium Company

RMITC-WPS-1

April 1993

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ROADMAP TO WASTE PROFILE SHEETS (WPS)

Waste Profile Sheets (WPS) have been compiled in this report for each of the mixed waste streams identified at the different DOE sites. Each WPS is a concise summary of the information required by the FFCAct-1992, with waste stream specific data primarily derived from the Waste Management Information System (WMIS) database. Each WPS consists of the following items:

Header: The information in the header in each WPS includes the State, the official name of the site, an identification number, an identifying waste stream name, the waste type, and the waste matrix. The identification number is either a number assigned by the WMIS database or a number assigned by the site. The waste stream name is a unique identifier which corresponds to the name used in the WMIS database, or is assigned by the site. The waste type is either HLW, MTRU, or MLLW. The waste matrix corresponds to the categories (or their further subdivisions) defined earlier based on the physical and chemical form of the waste.

Waste Stream Description and Source: This section of the WPS presents a short description of the source of the waste and the waste stream characteristics.

Inventory Table: The inventory table in each WPS reports the volume (m^3) and/or mass (kg) of each waste stream currently in storage, and projected to be generated in the next five years. The table also indicates the date assumed in calculating the current and projected inventories. As required by the FFCAct-1992, the table also differentiates between waste not subject to LDR and that subject to LDR for the current inventory.

Treatability Group: This section lists the name of the treatability group to which the waste stream belongs.

Treatment Status, Technology Status: This section of the WPS lists the status of the technology that could be applied to the waste stream for compliance with the LDR. This section provides information on if the waste stream is currently being treated, and if technology options and facilities for the treatment exist.

Radiation Characteristics Section: This section of the WPS provides additional information on the radiological characteristics of the waste (in addition to characterizing the waste stream as HLW, MTRU, or MLLW). This section of the WPS specifies whether the waste stream is contact handled or remote handled, if the radionuclides are alpha or beta/gamma emitters, and if they contain activation products.

Radiation Effects Section: As required by the FFCAct-1992, this section of the WPS lists possible effects of the radiological characteristics of the waste stream on treatment technologies that could be applicable to that waste stream. For example, radiation levels may require remote handling of the waste and affect the design and operation of the treatment facility. The presence of volatile radionuclides may require the containment of all off-gases from the treatment system.

Waste Minimization Activities: As required by the FFCAct-1992, this section of the WPS provides information on the waste minimization practices being used for the waste stream. This section provides information on if the waste minimization practices include good operating practices, technology changes, raw material changes, product changes, etc.

EPA Code: This table of the WPS reports the EPA hazardous waste codes applicable to the waste stream, the basis for assigning the codes (process knowledge or sampling/analysis), the LDR basis (which is either technology based or concentration based), and the BDAT for each of the EPA hazardous waste codes.

In summary, the WPS for each waste stream, along with the site sections in the report for each State (Section B), summarize the site-specific information required by the FFCAct-1992.

State: Ohio | ID #: 2294
Site: RMI TITANIUM COMPANY
Waste Stream Name: KAOL WOOL (HAZARDOUS)
Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:
This is a non-asbestos insulating material which is a woven fabric type refractory ceramic fiber. The material is similiar in appearance to cotton gauze. Kaol wool is the insulation material from the lids on RMI's salt baths, press housing, and is used as an extrusion cooling media.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.8	220.5	0.000	0.000	1.8	220.5	0.442	54.4

Treatability Group:
MLLW CH, Inorganic Debris, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. No modifications are necessary.

Radiation Characteristics:
1) Contact-handled

Waste-Specific Radiation Effects on Treatment:
1) None.

Material contains uranium.

Waste Minimization Activities:
1) Change in operations status; process interruptions; work stoppages; mission changes; and new processes.

General Comments:
Kg mass reflects net weight of 55 gallon drums.

State: Ohio	**ID #: 2294**
Site: RMI TITANIUM COMPANY	
Waste Stream Name: KAOL WOOL (HAZARDOUS)	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 2296**
Site: RMI TITANIUM COMPANY	
Waste Stream Name: LATHE OIL-WATER COOLANT WASTE (LIQUID)	
Matrix: Aqueous Liquid	**Waste Type: MLLW**

Waste Stream Description and Source:

This waste stream is spent lathe oil-water coolant waste which consists of water and a water miscible metalworking fluid consisting of petroleum hydrocarbons plus additives. This lathe oil-water coolant waste was generated when lead-lubricant contaminated uranium was lathe machined during RMI's former production process. This production process is no longer performed.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.221	194.6	0.221	185.1	0.442	379.7	0.000	0.000

Treatability Group:

MLLW CH, Aqueous Liquid, Toxic Metals w/o Mercury

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Material contains uranium.

Waste Minimization Activities:

1) Change in operations status; process interruptions; work stoppages; mission changes; and new processes.

The process that generated this waste is no longer in operation.

General Comments:

Waste that is projected to be generated from Environmental Restoration activities is provided in Table 2-4.

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State: Ohio	ID #: 2296
Site: RMI TITANIUM COMPANY	
Waste Stream Name: LATHE OIL-WATER COOLANT WASTE (LIQUID)	
Matrix: Aqueous Liquid	Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Chemical Precipitation

State: Ohio	**ID #: 2297**
Site: RMI TITANIUM COMPANY	
Waste Stream Name: LATHE OIL-WATER COOLANT WASTE (SOLID)	
Matrix: Other	**Waste Type: MLLW**

Waste Stream Description and Source:

This waste stream is spent oil dry clay based absorbent mixed with lathe oil-water coolant waste. The latter consists of water and a water miscible metal working fluid consisting of petroleum hydrocarbons plus additives. This lathe oil-water coolant waste (Solid) was generated when lead-lubricant contaminated uranium was lathe machined during RMI's former production process. The waste was mixed with oil-dry mixture.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.1	804.7	0.000	0.000	1.1	804.7	0.221	192.8

Treatability Group:

MLLW CH, Other, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology assessment has not started.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Change in operations status; process interruptions; work stoppages; mission changes; and new processes.

General Comments:

Solid material from cleanup of small spill of lathe coolant oil.

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State: Ohio	**ID #: 2297**
Site: RMI TITANIUM COMPANY	
Waste Stream Name: LATHE OIL-WATER COOLANT WASTE (SOLID)	
Matrix: Other	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

7.84

State: Ohio	ID #: 2301
Site: RMI TITANIUM COMPANY	
Waste Stream Name: PUMP STATION ACCUMULATOR OIL (LIQUID)	
Matrix: Organic Liquids	Waste Type: MLLW

Waste Stream Description and Source:

This waste consists of a paraffinic oil blend plus anti-rust additives which are contaminated with lead. Pump station accumulator oil is oil contaminated with lead from lead seals within RMI's pump station equipment.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.221	194.1	0.221	185.5	0.442	379.6	0.000	0.000

Treatability Group:

MLLW CH, Organic Liquids, Toxic Metals w/o Mercury

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Product change: product substitution and conservation; and change in product composition.

The process that generated this waste is no longer in operation.

General Comments:

Material contains Uranium. Waste that is projected to be generated from Environmental Restoration activities is provided in Table 2-4.

State: Ohio ID #: 2301

Site: RMI TITANIUM COMPANY

Waste Stream Name: PUMP STATION ACCUMULATOR OIL (LIQUID)

Matrix: Organic Liquids Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

State: Ohio	ID #: 2302
Site: RMI TITANIUM COMPANY	
Waste Stream Name: PUMP STATION ACCUMULATOR OIL (SOLID)	
Matrix: Other	Waste Type: MLLW

Waste Stream Description and Source:

This waste is a mixture of oil dry which is a clay based absorbent and pump station oil which is a paraffinic oil blend. This waste is generated from an oil spill of pump station accumulator oil. Pump station accumulator oil is an oil contaminated with lead from lead seals within RMI's pump station equipment.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.020	0.221	192.8	0.221	192.8	0.221	192.8

Treatability Group:

MLLW CH, Other, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. Technology options have not been analyzed.

Technology Status:

Technology assessment has not started.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Product change: product substitution and conservation; and change in product composition.

General Comments:

Material from the cleanup of a spill.

State: Ohio | ID #: 2302

Site: RMI TITANIUM COMPANY

Waste Stream Name: PUMP STATION ACCUMULATOR OIL (SOLID)

Matrix: Other | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D008B	Conc.	Stabilization

State: Ohio **ID #: 2305**

Site: RMI TITANIUM COMPANY

Waste Stream Name: SALT BATH FLOOR SWEEPINGS

Matrix: Heterogeneous Debris **Waste Type: MLLW**

Waste Stream Description and Source:

The material consists of floor sweepings around the salt baths and extrusion press area. Salt bath floor sweepings are sweepings generated from the salt bath area.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	0.221	353.0	0.221	353.0	0.000	0.000

Treatability Group:

MLLW CH, Heterogeneous Debris, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology assessment has not started.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Contains uranium.

Waste Minimization Activities:

1) Change in operations status; process interruptions; work stoppages; mission changes; and new processes.

The process that generated this waste is no longer in operation.

General Comments:

Material was generated during housekeeping operations in the area of the salt baths. The granular material contains uranium and barium.

State: Ohio	**ID #: 2305**
Site: RMI TITANIUM COMPANY	
Waste Stream Name: SALT BATH FLOOR SWEEPINGS	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 2311

Site: RMI TITANIUM COMPANY

Waste Stream Name: TCE CONTAM. MONITORING WELL BAIL WATER

Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:

The waste consists of groundwater contaminated with low levels of trichloroethylene. TCE contaminated monitory well bail water is generated from the sampling of TCE contaminated groundwater wells.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.5	1,258.3	0.000	0.000	1.5	1,258.3	0.000	0.000

Treatability Group:

MLLW CH, Aqueous Liquid, Toxic Organics

Treatment Status:

Groundwater cleanup technology is being investigated.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Not Applicable.

N/A; wells must be sampled.

General Comments:

Groundwater cleanup technology is being investigated.
Waste contains uranium.

Waste that is projected to be generated from Environmental Restoration activities is provided in Table 2-4.

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State: Ohio	**ID #: 2311**
Site: RMI TITANIUM COMPANY	
Waste Stream Name: TCE CONTAM. MONITORING WELL BAIL WATER	
Matrix: Aqueous Liquid	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D040		Not currently prohibited under the LDR Program.

State: Ohio | ID #: 2317

Site: RMI TITANIUM COMPANY

Waste Stream Name: CHLORINATED SOLV./STODDARD SOLV. (SOLID)

Matrix: Organic Debris | Waste Type: MLLW

Waste Stream Description and Source:

This waste stream consists of paper, cloth towels and gloves used to put on and remove solvent and greases during general maintenance and production degreasing operations. The waste is a mixture of paper and cloth material contaminated with solvent which consists of aliphatic petroleum hydrocarbons, methylene chloride, perchloroethylene, paraffinic and naphthionic hydrocarbons, and mineral spirits. The chlorinated solvent with stoddard solvents in solid physical form are the solvent rags generated by miscellaneous maintenance and production activities.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.663	104.3	2.2	466.3	2.9	570.6	0.000	0.000

Treatability Group:

MLLW CH, Organic Debris, Toxic Organics

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Waste Minimization Activities:

1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

The process that generated this waste is no longer in operation.

General Comments:

Waste that is projected to be generated from Environmental Restoration activities is provided in Table 2-4.

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State: Ohio | ID #: 2317

Site: RMI TITANIUM COMPANY

Waste Stream Name: CHLORINATED SOLV./STODDARD SOLV. (SOLID)

Matrix: Organic Debris | Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
F001	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio	**ID #: 2330**
Site: RMI TITANIUM COMPANY	
Waste Stream Name: CHLORINATED SOLV./STODDARD SOLV.(LIQUID)	
Matrix: Organic Liquids	**Waste Type: MLLW**

Waste Stream Description and Source:

This waste stream is spent solvent from general maintenance and production degreasing activities. The waste is a mixture of aliphatic petroleum hydrocarbons, methylene chloride, perchloroethylene, paraffinic, and naphthionic hydrocarbons, and mineral spirits. The chlorinated solvent with stoddard solvent waste is generated by miscellaneous maintenance and production activities.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.000	0.000	1.3	399.6	1.3	399.6	0.000	0.000

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Material contains uranium.

Waste Minimization Activities:

1) Improved operating practices: changes in material handling and inventory procedures; waste segregation; and changes in production scheduling.

The process that generated this waste is no longer in operation.

General Comments:

Waste that is projected to be generated from Environmental Restoration activities is provided in Table 2-4.

State: Ohio ID #: 2330

Site: RMI TITANIUM COMPANY

Waste Stream Name: CHLORINATED SOLV./STODDARD SOLV.(LIQUID)

Matrix: Organic Liquids Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
F001	Conc.	Incineration

State: Ohio	**ID #: 2345**
Site: RMI TITANIUM COMPANY	
Waste Stream Name: DIE HEAD RESIDUE (HAZARDOUS)	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

Waste Stream Description and Source:

This waste stream was generated through collection of the material associated with extrusion press die head after an extrusion. The material consists of graphite, copper flashings, kaol wool, burlap pads, steel and scrap extrusion pieces, rag, aluminum foil, lube brushes, rubber, floor sweepings, die head sweepings, and other miscellaneous material. Die head residue (hazardous) was generated as a byproduct of RMI's former operation extrusion process. This production process is no longer performed.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.442	236.8	0.000	0.000	0.442	236.8	0.000	0.000

Treatability Group:

MLLW CH, Heterogeneous Debris, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology assessment has not started.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Material contains uranium.

Waste Minimization Activities:

1) Change in operations status; process interruptions; work stoppages; mission changes; and new processes.

The process that generated this waste is no longer in operation.

State: Ohio	**ID #: 2345**
Site: RMI TITANIUM COMPANY	
Waste Stream Name: DIE HEAD RESIDUE (HAZARDOUS)	
Matrix: Heterogeneous Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Ohio | ID #: 2350

Site: RMI TITANIUM COMPANY

Waste Stream Name: FLOOR STRIPPING CHLORINATED SOLVENT

Matrix: Organic Liquids | Waste Type: MLLW

Waste Stream Description and Source:

This waste material consists of a methylene chloride based floor stripping sludge which was generated during the stripping of a sealant from the cement floors of the manufacturing facility. The material is sludge-like and consists of methylene chloride, methyl alcohol, floor sealant, dirt and sludge from the floor. Floor Stripping Chlorinated Solvent was generated during the annual maintenance shutdown of the facility as in-plant cement floors were stripped and sealed.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
5.5	4,302.0	0.000	0.000	5.5	4,302.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:

Currently being treated off-site at the K-25 Site TSCA Incinerator facility.

Technology Status:

Technology exists. No modifications are necessary.

Radiation Characteristics:

1) Contact-handled

Waste-Specific Radiation Effects on Treatment:

1) None.

Material contains uranium.

Waste Minimization Activities:

1) Product change: product substitution and conservation; and change in product composition.

The process that generated this waste is no longer in operation.

General Comments:

Waste that is projected to be generated from Environmental Restoration activities is provided in Table 2-4.

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State: Ohio	**ID #: 2350**
Site: RMI TITANIUM COMPANY	
Waste Stream Name: FLOOR STRIPPING CHLORINATED SOLVENT	
Matrix: Organic Liquids	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration

24.0 PENNSYLVANIA

Pennsylvania has one facility that generates, expects to generate, and/or stores DOE-managed mixed waste, the Bettis Atomic Power Laboratory.

Figure 24-1 shows the location of this facility.

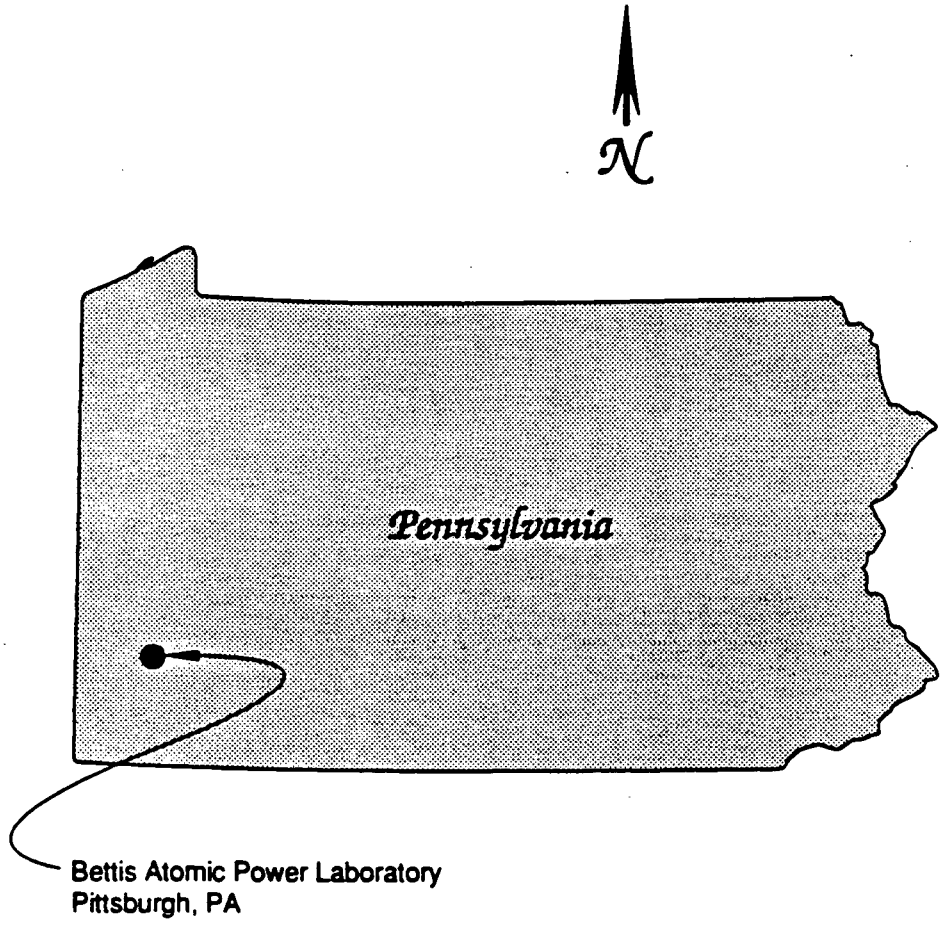

Figure 24-1. Pennsylvania Facility that Generates, Expects to Generate, and/or Stores DOE-managed Mixed Waste.

24.1 Bettis Atomic Power Laboratory

Bettis Atomic Power Laboratory (BAPL) is located on a 0.82 km^2 tract on a plateau above the Monogahela River in West Mifflin, Pennsylvania, about 13 km southeast of Pittsburgh (Figure 24-1). The Laboratory is operated for the DOE by the Westinghouse Electric Corporation and is engaged solely in the design and development of naval nuclear propulsion plants. Laboratory operations include development and testing of nuclear fuel materials and reactor materials including radiochemical analyses. The only mixed waste generated from these activities is mixed low-level waste. Since the State of Pennsylvania currently has base RCRA authority, but does not have authority to regulate the hazardous constituents of mixed waste, this waste is not subject to LDR.

24.1.1 Mixed Waste

24.1.1.1 High-Level Waste

There is no HLW currently stored or expected to be generated at BAPL.

24.1.1.2 Mixed Transuranic Waste

There is no MTRU waste currently stored or expected to be generated at BAPL.

24.1.1.3 Mixed Low-Level Waste

BAPL has 28.37 m^3 (16,775 kg) of mixed low-level waste stored on site as of December 31, 1992, (Table 24.1-1). Stored waste consists of 18 waste streams; eleven of these streams are no longer generated. The stored mixed low-level waste consists primarily of organic sludge (RCRA-contaminated oil and spent solvents with solids) and heterogeneous debris (debris with VOCs and PCBs and mercury-containing debris). Major hazardous constituents are heavy metals and organic solvents. The 5-year projected generation of mixed waste is about 4.8 m^3 (3,300 kg) (Table 24.1-1). No new streams are expected to be generated.

All waste streams are contact-handled with the exception of the barium-contaminated ion-exchange resin which is remotely handled. All streams are beta/gamma emitters. Eight streams also contain alpha emitters with a radiation level < 10 nCi/g, and 1 stream, waste oil with heavy metals and PCBs, has an alpha radiation level of 10 to 100 nCi/g. The scintillation standards waste stream contains tritium.

Waste minimization includes eliminating wherever technically allowed, the use of acetone and other F-listed solvents, lead and chromium-based paints, lead shielding in disposal containers, and chemical paint removers.

24.1.2 Treatment Facilities

Small quantities of mixed waste are generated at BAPL. As of this date, no treatment facilities for the waste have been identified. Where possible, simple treatment by stabilization in the accumulation container will be performed in accordance with applicable regulations.

Table 24.1-1
Mixed Wastes at the Bettis Atomic Power Laboratory

Waste Type/Matrix	Number of Waste Streams	Inventory		Number of Waste Streams	Five-Year Projection	
		(m^3)	(kg)		(m^3)	(kg)
WASTE TYPE – MLLW						
CH, Organic Liquids	2	0.11	110.30	0	0.00	0.00
CH, Aqueous Liquid	1	<0.10	1.80	1	<0.10	9.00
CH, Organic Sludges/particulates	5	21.21	9,851.90	3	2.35	946.00
RH, Organic Sludges/particulates	1	<0.10	1.00	0	0.00	0.00
CH, Inorganic Sludges/particulates	3	0.21	56.90	1	0.21	55.00
CH, Soil With <50% Debris	1	0.84	693.00	0	0.00	0.00
CH, Soils	1	0.42	432.00	0	0.00	0.00
CH, Organic Debris	2	0.53	224.00	1	0.10	51.00
CH, Inorganic Debris	1	0.21	42.00	0	0.00	0.00
CH, Heterogeneous Debris	1	4.83	5,362.00	1	2.10	2,250.00
Sub-Total MLLW:	18	28.37	16,774.90	7	4.77	3,311.00
TOTAL:	18	28.37	16,774.90	7	4.77	3,311.00

24.1.3 Technology Development

Since radiation levels are not of significance to affect treatment, these mixed waste streams should require treatment technology comparable to that used in treating similar hazardous, but non-radioactive waste streams. Concentration of radionuclides in treatment residues will need to be considered. There are no site-specific technology development activities for BAPL.

24.1.4 Excess Heavy Metal Bearing Equipment

During equipment decommissioning, every effort is made to separate lead-bearing and other heavy metal components from the radioactive parts of the equipment to avoid declaring the entire unit mixed waste. The excess equipment containing recyclable heavy metals in storage as of December 31, 1992 was 7 m^3 (25,500 kg), with approximately 3.5 m^3 (8800 kg) expected to become excess in the next 5 years.

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WASTE

PROFILE

SHEETS

Bettis Atomic Power Laboratory

BETTIS-WPS-1

April 1983

805

ROADMAP TO WASTE PROFILE SHEETS (WPS)

Waste Profile Sheets (WPS) have been compiled in this report for each of the mixed waste streams identified at the different DOE sites. Each WPS is a concise summary of the information required by the FFCAct-1992, with waste stream specific data primarily derived from the Waste Management Information System (WMIS) database. Each WPS consists of the following items:

Header: The information in the header in each WPS includes the State, the official name of the site, an identification number, an identifying waste stream name, the waste type, and the waste matrix. The identification number is either a number assigned by the WMIS database or a number assigned by the site. The waste stream name is a unique identifier which corresponds to the name used in the WMIS database, or is assigned by the site. The waste type is either HLW, MTRU, or MLLW. The waste matrix corresponds to the categories (or their further subdivisions) defined earlier based on the physical and chemical form of the waste.

Waste Stream Description and Source: This section of the WPS presents a short description of the source of the waste and the waste stream characteristics.

Inventory Table: The inventory table in each WPS reports the volume (m^3) and/or mass (kg) of each waste stream currently in storage, and projected to be generated in the next five years. The table also indicates the date assumed in calculating the current and projected inventories. As required by the FFCAct-1992, the table also differentiates between waste not subject to LDR and that subject to LDR for the current inventory.

Treatability Group: This section lists the name of the treatability group to which the waste stream belongs.

Treatment Status, Technology Status: This section of the WPS lists the status of the technology that could be applied to the waste stream for compliance with the LDR. This section provides information on if the waste stream is currently being treated, and if technology options and facilities for the treatment exist.

Radiation Characteristics Section: This section of the WPS provides additional information on the radiological characteristics of the waste (in addition to characterizing the waste stream as HLW, MTRU, or MLLW). This section of the WPS specifies whether the waste stream is contact handled or remote handled, if the radionuclides are alpha or beta/gamma emitters, and if they contain activation products.

Radiation Effects Section: As required by the FFCAct-1992, this section of the WPS lists possible effects of the radiological characteristics of the waste stream on treatment technologies that could be applicable to that waste stream. For example, radiation levels may require remote handling of the waste and affect the design and operation of the treatment facility. The presence of volatile radionuclides may require the containment of all off-gases from the treatment system.

Waste Minimization Activities: As required by the FFCAct-1992, this section of the WPS provides information on the waste minimization practices being used for the waste stream. This section provides information on if the waste minimization practices include good operating practices, technology changes, raw material changes, product changes, etc.

EPA Code: This table of the WPS reports the EPA hazardous waste codes applicable to the waste stream, the basis for assigning the codes (process knowledge or sampling/analysis), the LDR basis (which is either technology based or concentration based), and the BDAT for each of the EPA hazardous waste codes.

In summary, the WPS for each waste stream, along with the site sections in the report for each State (Section B), summarize the site-specific information required by the FFCAct-1992.

State: Pennsylvania	**ID #: 49**
Site: BETTIS ATOMIC POWER LABORATORY	
Waste Stream Name: OIL CONTAINING HEAVY METALS #1	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

Waste Stream Description and Source:

Lubricating oil and hydraulic oil from equipment decommissioning.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
12.7	5,306.0	0.000	0.000	12.7	5,306.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Sludges/Particulates, Toxic Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:

1) Beta/gamma emitter
2) Contact-handled

Waste-Specific Radiation Effects on Treatment:

Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Top 5 Radionuclides present: Cs-137, Sr-90, Y-90, Ba-137m, Ni-63.

Waste Minimization Activities:

Not applicable. Waste is no longer generated.

State: Pennsylvania **ID #: 49**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: OIL CONTAINING HEAVY METALS #1

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration
D010	Conc.	Stabilization
D011	Conc.	Stabilization

State: Pennsylvania	**ID #: 50**
Site: BETTIS ATOMIC POWER LABORATORY	
Waste Stream Name: SPENT M-192 SOLVENT RAGS	
Matrix: Organic Debris	**Waste Type: MLLW**

Waste Stream Description and Source:
M-192 solvent and rags used to clean material and tooling.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.210	71.0	0.000	0.000	0.210	71.0	0.100	51.0

Treatability Group:
MLLW CH, Organic Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:
1) Alpha emitter, < 10 nCi/g
2) Beta/gamma emitter
3) Contact-handled

Waste-Specific Radiation Effects on Treatment:
Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Radionuclide is U-depleted.

Waste Minimization Activities:

Good operating practices: material handling and inventory procedures; waste segregation.

State: Pennsylvania	**ID #: 50**
Site: BETTIS ATOMIC POWER LABORATORY	
Waste Stream Name: SPENT M-192 SOLVENT RAGS	
Matrix: Organic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F003	Conc.	Incineration
F005A	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Pennsylvania	**ID #: 51**
Site: BETTIS ATOMIC POWER LABORATORY	
Waste Stream Name: OIL CONTAINING HEAVY METALS #2	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

Waste Stream Description and Source:
Lubricating oil and hydraulic oil from equipment decommissioning.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.530	530.0	0.000	0.000	0.530	530.0	0.210	210.0

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:
1) Beta/gamma emitter
2) Contact-handled

Waste-Specific Radiation Effects on Treatment:
Radiation levels are not expected to cause significant radiological problems during treatment; treatment would be similar to that done on non-radioactive hazardous waste having the same characteristics. Concentration of radionuclides in treatment residue will be considered.

Waste Minimization Activities:
Good operating practices: material handling and inventory procedures; waste segregation; or changes in production scheduling.

State: Pennsylvania **ID #: 51**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: OIL CONTAINING HEAVY METALS #2

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
D011	Conc.	Stabilization

State: Pennsylvania | ID #: 388

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: SPENT M-192 SOLVENT

Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Solvent blend used to clean materials and tooling.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
1.7	708.0	0.000	0.000	1.7	708.0	0.044	36.0

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:
1) Alpha emitter, < 10 nCi/g
2) Beta/gamma emitter
3) Contact-handled

Waste-Specific Radiation Effects on Treatment:
Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Radionuclides present: U-234, U-235, Th-231.

Waste Minimization Activities:

1) Good operating practices: material handling and inventory procedures; waste segregation.
2) Technology changes; Process changes

State: Pennsylvania **ID #: 388**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: SPENT M-192 SOLVENT

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F003	Conc.	Incineration
F005A	Conc.	Incineration

State: Pennsylvania **ID #: 390**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: LEAD & CHROM. BASED PAINT CHIPS

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

Waste Stream Description and Source:

Lead and chromium based paint was removed in order to decontaminate radiological facilities and equipment.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.210	55.0	0.000	0.000	0.210	55.0	0.210	55.0

Treatability Group:

MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. Paint chips will be subjected to simple treatment by stabilization in the accumulation container in accordance with applicable regulations.

Technology Status:

Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:

1) Alpha emitter, < 10 nCi/g
2) Beta/gamma emitter
3) Contact-handled

Waste-Specific Radiation Effects on Treatment:

Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Radionuclides present: Cs-137, Sr-90, Ba-137m, U-234.

Waste Minimization Activities:

The use of lead and chromium-based paints has been eliminated wherever technically feasible.

State: Pennsylvania **ID #: 390**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: LEAD & CHROM. BASED PAINT CHIPS

Matrix: Inorganic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D007	Conc.	Chemical Reduction followed by Stabilization
D008B	Conc.	Stabilization

State: Pennsylvania **ID #: 838**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: SOLID WASTE WITH F-LISTED SOLVENT,PAINT

Matrix: Organic Debris **Waste Type: MLLW**

Waste Stream Description and Source:

Solid waste containing solvent and removed paint combined and compacted. Generated from facility decontamination and cleaning materials and tooling; contains alpha emitting radionuclides.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.320	153.0	0.000	0.000	0.320	153.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Debris, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:

1) Alpha emitter, < 10 nCi/g
2) Beta/gamma emitter
3) Contact-handled

Waste-Specific Radiation Effects on Treatment:

Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Radionuclides present: U-enriched, Ni-63, Th-natural, Cs-137, Ba-137m.

Waste Minimization Activities:

Waste is no longer generated.

State: Pennsylvania **ID #: 838**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: SOLID WASTE WITH F-LISTED SOLVENT,PAINT

Matrix: Organic Debris **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F002	Conc.	Incineration
F003	Conc.	Incineration
F005A	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Pennsylvania | ID #: 839
Site: BETTIS ATOMIC POWER LABORATORY
Waste Stream Name: SOLIDS WITH SOLVENTS
Matrix: Organic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Solid waste, such as charcoal and rags.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
6.3	3,300.0	0.000	0.000	6.3	3,300.0	2.1	700.0

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:
1) Beta/gamma emitter
2) Contact-handled

Waste-Specific Radiation Effects on Treatment:
Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Radionuclides: Sb-125, I-129, Pm-147, Cs-134, Co-60.

Waste Minimization Activities:
1) Good operating practices: material handling and inventory procedures; waste segregation.
2) Technology changes: process changes.
3) Product change: product substitution and conservation.

State: Pennsylvania **ID #: 839**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: SOLIDS WITH SOLVENTS

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
F001	Conc.	Incineration
F003	Conc.	Incineration

State: Pennsylvania | ID #: 2056

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: MERCURY CONTAINING WASTE

Matrix: Inorganic Debris | Waste Type: MLLW

Waste Stream Description and Source:

Cloth, metal and glass waste containing small amounts of hardened mercury residue. Generated from equipment repair.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.210	42.0	0.000	0.000	0.210	42.0	0.000	0.000

Treatability Group:

MLLW CH, Inorganic Debris, Toxic Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. Cannot be amalgamated because waste is not a liquid.

Technology Status:

Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:

1) Beta/gamma emitter
2) Contact-handled

Waste-Specific Radiation Effects on Treatment:

Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Radionuclides present: Sb-125, Ni-63, Eu-154, Co-60, Te-125m.

Waste Minimization Activities:

This waste stream is no longer generated.

State: Pennsylvania	**ID #: 2056**
Site: BETTIS ATOMIC POWER LABORATORY	
Waste Stream Name: MERCURY CONTAINING WASTE	
Matrix: Inorganic Debris	**Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D009C	Conc.	Thermal Recovery of Metals; Acid Leaching; Stabilization; or Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Pennsylvania | ID #: 0000002058

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: VOC CONTAMINATED SOIL

Matrix: Soils | Waste Type: MLLW

Waste Stream Description and Source:
Soil sampling.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.420	432.0	0.000	0.000	0.420	432.0	0.000	0.000

Treatability Group:
MLLW CH, Soils, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:
1) Beta/gamma emitter
2) Contact-handled

Waste-Specific Radiation Effects on Treatment:
Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Radionuclides present: Sr-90, Cs-137.

Waste Minimization Activities:
Waste is no longer generated.

State: Pennsylvania
ID #: 0000002058
Site: BETTIS ATOMIC POWER LABORATORY
Waste Stream Name: VOC CONTAMINATED SOIL
Matrix: Soils
Waste Type: MLLW

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D039		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration

State: Pennsylvania **ID #: 0000002062**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: WASTE OIL WITH HEAVY METALS AND PCBS

Matrix: Organic Liquids **Waste Type: MLLW**

Waste Stream Description and Source:

Equipment draining and decommissioning; contains alpha emitting radionuclides.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.110	110.0	0.000	0.000	0.110	110.0	0.000	0.000

Treatability Group:

MLLW CH, Organic Liquids, Toxic Metals w/ Mercury

Treatment Status:

Have not identified a planned facility for this waste stream at this time. Waste is currently a liquid but will be absorbed for shipment.

Technology Status:

Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:

1) Contact-handled
2) Beta/gamma emitter
3) Alpha emitter, < 10 nCi/g

Waste-Specific Radiation Effects on Treatment:

Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered.

Waste Minimization Activities:

Waste is no longer generated.

State: Pennsylvania **ID #: 0000002062**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: WASTE OIL WITH HEAVY METALS AND PCBS

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D006B	Conc.	Stabilization
D008B	Conc.	Stabilization
D009A	Tech.	Incineration; or Mercury Roast/Retort
D010	Conc.	Stabilization

State: Pennsylvania **ID #: 0000002069**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: SLUDGE CONTAINING SOLVENTS

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

Waste Stream Description and Source:
Facility decontamination.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.004	7.9	0.000	0.000	0.004	7.9	0.000	0.000

Treatability Group:
MLLW CH, Organic Sludges/Particulates, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:
1) Alpha emitter, < 10 nCi/g
2) Beta/gamma emitter
3) Contact-handled

Waste-Specific Radiation Effects on Treatment:
Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Radionuclides present: U-234, U-238, Th-234, U-235, Po-234m.

Waste Minimization Activities:

Waste is no longer generated.

State: Pennsylvania **ID #: 0000002069**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: SLUDGE CONTAINING SOLVENTS

Matrix: Organic Sludges/Particulates **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D035		Not currently prohibited under the LDR Program.
D039		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F003	Conc.	Incineration
F005A	Conc.	Incineration

State: Pennsylvania | ID #: 0000002070

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: VOC & PCB CONTAMINATED DEBRIS

Matrix: Heterogeneous Debris | Waste Type: MLLW

Waste Stream Description and Source:
Debris removed from system.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
4.8	5,362.0	0.000	0.000	4.8	5,362.0	2.1	2,250.0

Treatability Group:
MLLW CH, Heterogeneous Debris, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:
1) Beta/gamma emitter
2) Contact-handled

Waste-Specific Radiation Effects on Treatment:
Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Radionuclides present: Cs-137, Sr-90.

Waste Minimization Activities:

1) Good operating practices; material handling and inventory procedures; waste segregation.
2) The use of oils containing PCB's has been eliminated.

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State: Pennsylvania **ID #: 0000002070**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: VOC & PCB CONTAMINATED DEBRIS

Matrix: Heterogeneous Debris **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Sampling/Analysis

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D039		Not currently prohibited under the LDR Program.
D040		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F002	Conc.	Incineration
F005A	Conc.	Incineration

The alternate LDR treatment standard for debris is treatment prior to land disposal using any of the following technologies: extraction (physical, chemical or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Pennsylvania | ID #: 0000002072

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: VOC & PCB CONTAMINATED SOIL

Matrix: Soil with <50% Debris | Waste Type: MLLW

Waste Stream Description and Source:

Soil containing F listed solvents and PCBs; contains alpha emitting radionuclides.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.840	693.0	0.000	0.000	0.840	693.0	0.000	0.000

Treatability Group:

MLLW CH, Soil with <50% Debris, Toxic Organics

Treatment Status:

Have not identified a planned facility for this waste stream at this time.

Technology Status:

Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:

1) Alpha emitter, < 10 nCi/g
2) Beta/gamma emitter
3) Contact-handled

Waste-Specific Radiation Effects on Treatment:

Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Radionuclides: Natural Uranium, Cs-137, Sr-90.

Waste Minimization Activities:

Waste is no longer generated.

General Comments:

The alternate LDR treatment standard for debris is treatment prior to land disposal using any one of the following technologies; extraction (physical, chemical, or thermal), destruction (biological, chemical, or thermal), macro/microencapsulation or sealing.

State: Pennsylvania **ID #: 0000002072**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: VOC & PCB CONTAMINATED SOIL

Matrix: Soil with <50% Debris **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D039		Not currently prohibited under the LDR Program.
F001	Conc.	Incineration
F002	Conc.	Incineration

State: Pennsylvania | ID #: 0000002073

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: ZIRCONYL NITRATE

Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Chemistry lab.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.002	1.4	0.000	0.000	0.002	1.4	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Ignitable, Corrosive, or Reactive Only

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:
1) Beta/gamma emitter
2) Contact-handled

Waste-Specific Radiation Effects on Treatment:
Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Radionuclides present: Cs-137, Sr-90, Y-90, Ba-137m, Ni-63.

Waste Minimization Activities:

Waste is no longer generated.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001F	Tech.	Deactivation

State: Pennsylvania | ID #: 0000002074
Site: BETTIS ATOMIC POWER LABORATORY
Waste Stream Name: VANADIUM PENTOXIDE
Matrix: Inorganic Sludges/Particulates | Waste Type: MLLW

Waste Stream Description and Source:
Chemistry lab.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
< 0.001	0.500	0.000	0.000	< 0.001	0.500	0.000	0.000

Treatability Group:
MLLW CH, Inorganic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:
1) Beta/gamma emitter
2) Contact-handled

Waste-Specific Radiation Effects on Treatment:
Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered.

Waste Minimization Activities:

Waste is no longer generated.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
P120	Tech.	Stabilization

State: Pennsylvania **ID #: 0000002075**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: SCINTILLATION STANDARDS

Matrix: Organic Liquids **Waste Type: MLLW**

Waste Stream Description and Source:
Laboratory testing waste.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
< 0.001	0.300	0.000	0.000	< 0.001	0.300	0.000	0.000

Treatability Group:
MLLW CH, Organic Liquids, Toxic Organics

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:
1) Volatile radionuclide
2) Beta/gamma emitter
3) Contact-handled

Waste-Specific Radiation Effects on Treatment:
Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Volatile radionuclides present: C 14, H 3, Cl 36, I 129.

Waste Minimization Activities:

Waste is no longer generated.

State: Pennsylvania **ID #: 0000002075**

Site: BETTIS ATOMIC POWER LABORATORY

Waste Stream Name: SCINTILLATION STANDARDS

Matrix: Organic Liquids **Waste Type: MLLW**

EPA CODES

Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D001A	Tech.	Fuel Substitution; Organics Recovery; or Incineration
F003	Conc.	Incineration
F005A	Conc.	Incineration

State: Pennsylvania	**ID #: 0000002076**
Site: BETTIS ATOMIC POWER LABORATORY	
Waste Stream Name: ION EXCHANGE RESIN	
Matrix: Organic Sludges/Particulates	**Waste Type: MLLW**

Waste Stream Description and Source:
Purification resin.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.001	1.000	0.000	0.000	0.001	1.000	0.000	0.000

Treatability Group:
MLLW RH, Organic Sludges/Particulates, Toxic Metals w/o Mercury

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Technology exists. No modifications are necessary. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:
1) Beta/gamma emitter
2) Remote handled

Waste-Specific Radiation Effects on Treatment:
1) Radiation levels requiring remote handling will affect the design and operation of a treatment facility, i.e., need for robotics, additional shielding, etc.

Waste Minimization Activities:

Waste is no longer generated.

EPA CODES
Waste Characterization Basis: Process Knowledge

Waste Codes	LDR Basis	Best Demonstrated Available Technologies
D005	Conc.	Chemical Precipitation; or Stabilization

State: Pennsylvania | ID #: 0000002077
Site: BETTIS ATOMIC POWER LABORATORY
Waste Stream Name: TCLP EXTRACTION FLUID
Matrix: Aqueous Liquid | Waste Type: MLLW

Waste Stream Description and Source:
Hazardous waste analysis.

Current Inventory as of December 31, 1992						Projected Generation 1993 through 1997	
Not Subject To LDR Prohibition		Subject To LDR Prohibition		TOTAL			
m^3	kg	m^3	kg	m^3	kg	m^3	kg
0.002	1.8	0.000	0.000	0.002	1.8	0.010	9.0

Treatability Group:
MLLW CH, Aqueous Liquid

Treatment Status:
Have not identified a planned facility for this waste stream at this time.

Technology Status:
Assessing technologies to determine if the technology exists, and if so, whether it needs modification. Technology to treat this waste should be consistent with technology needed to treat equivalent solely hazardous waste.

Radiation Characteristics:
1) Beta/gamma emitter
2) Volatile radionuclide
3) Contact-handled

Waste-Specific Radiation Effects on Treatment:
Radiation levels are not expected to cause significant problems during treatment; treatment would be similar to that done on non-radioactive, hazardous waste having the same characteristics. Concentration of radionuclides in treatment residues will be considered. Volatile radionuclides present: C 14, H 3, I 129, Kr 85.

Waste Minimization Activities:

Good operating practices; material handling and inventory procedures; waste segregation.

EPA CODES
Waste Characterization Basis: Sampling/Analysis

No applicable RCRA Codes have been identified.