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**OHIO ENVIRONMENTAL PROTECTION AGENCY  
DIRECTOR'S FINDINGS AND ORDERS AND  
SECTION IV CONSENT DECREE REPORT -  
TECHNICAL PROGRESS REPORT FOR  
OCTOBER 1 THRU DECEMBER 31, 1992**

01/20/93

**DOE-FN/OEPA  
DOE-0869-93  
7  
REPORT**



**Department of Energy**  
**Fernald Environmental Management Project**  
P.O. Box 398705  
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DOE-0869-93

JAN 20 1993

Mr. Thomas A. Winston, District Chief  
Ohio Environmental Protection Agency  
Southwest District Office  
40 South Main Street  
Dayton, Ohio 45402-2086

Dear Mr. Winston:

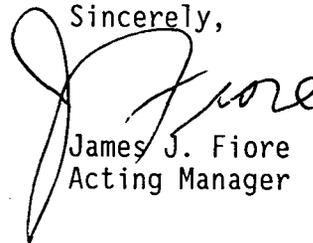
**OHIO ENVIRONMENTAL PROTECTION AGENCY DIRECTOR'S FINDINGS AND ORDERS AND  
SECTION IV CONSENT DECREE REPORT - TECHNICAL PROGRESS REPORT FOR OCTOBER 1  
THROUGH DECEMBER 31, 1992**

Enclosed is the quarterly technical progress report describing the Fernald Environmental Management Project progress with respect to compliance with the Proposed Amended Consent Decree and the Ohio Environmental Protection Agency Director's Findings and Orders.

In addition to this report, Revised Table C-1 is enclosed which provides a list of all waste streams identified under the Proposed Amended Consent Decree (PACD) as well as waste streams identified as a result of routine Resource Conservation and Recovery Act (RCRA) determinations.

If you or your staff have any questions, please contact David Rast at FTS/Commercial 513-738-6322.

Sincerely,



James J. Fiore  
Acting Manager

FN:Rast

Enclosure: As Stated

cc w/enc.:

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bcc w/enc.:

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OHIO ENVIRONMENTAL PROTECTION AGENCY DIRECTOR'S FINDINGS AND ORDERS AND  
SECTION IV CONSENT DECREE  
QUARTERLY TECHNICAL PROGRESS REPORT

October 1 - December 31, 1992

Introduction

Section 4.13 of the Proposed Amended Consent Decree requires that beginning October 20, 1990, and continuing on the twentieth day of every third month thereafter, DOE shall submit a quarterly technical progress report to Ohio EPA. In accordance with this section, the option of combining this report with ongoing reports being submitted pursuant to the Director's Findings and Orders issued June 4, 1987, is exercised.

This report describes activities at the Fernald Environmental Management Project (FEMP) from October 1, 1992, through December 31, 1992, and status as of December 31, 1992. The report contains two sections. Section I addresses outstanding commitments contained within the Proposed Amended Consent Decree. Section II pertains to compliance with Section IV of the Consent Decree, and incorporates remaining outstanding items from the Ohio EPA Director's Findings and Orders that have not been addressed within the Consent Decree.

OHIO ENVIRONMENTAL PROTECTION AGENCY DIRECTOR'S FINDINGS AND ORDERS AND **4058**  
SECTION IV CONSENT DECREE  
QUARTERLY TECHNICAL PROGRESS REPORT

October 1 - December 31, 1992

Section I - Proposed Amended Consent Decree

<u>Section</u>	<u>Activity</u>	<u>Status</u>
3.5.1.(d)(i)	Submit report on results and analysis for remaining drums identified under the Proposed Amended Consent Decree by September 30, 1992.	<b>COMPLETE.</b> Sampling and analysis report was submitted to the Ohio EPA on September 25, 1992.
3.8.(b)	Daily/weekly inspection of Plant 1 Pad.	<b>ONGOING.</b> Inspections are performed as required to meet the proposed requirements.
3.11	Report all Hazardous Waste Management Units (HWMU).	<b>IN PROCESS.</b> No new HWMUs were designated this quarter. The ASI Oil Storage Shed, located to the west of Waste Pit No. 5 in the ASI Camp, was reported as a designated HWMU on the last three quarters' input reports. The facility is currently under review. A final RCRA HWMU determination will be forthcoming.

OHIO ENVIRONMENTAL PROTECTION AGENCY DIRECTOR'S FINDINGS AND ORDERS AND  
SECTION IV CONSENT DECREE  
QUARTERLY TECHNICAL PROGRESS REPORT

October 1 - December 31, 1992

Section II - Consent Decree

<u>Section</u>	<u>Activity</u>	<u>Due Date</u>	<u>Status</u>
4.9	Perform cleanout of SWRB (when approximately 150,000 gallons of sediment is accumulated) at 24-month intervals based on maintenance schedules approved in the SWRB PTI.	12/18/92 9/27/93	<b>AS REQUIRED.</b> The SWRB west chamber was inspected during December 1992. The volume of sediment was below the level requiring cleanout. The next required inspection will be in September 1993 for the east chamber and December 1994 for the west chamber.
4.9	Perform cleanout of BSL (when approximately 500,000 gallons of sediment is accumulated, but no more than once per year, as stated in the BSL PTI).		<b>AS REQUIRED.</b> The lagoon was evaluated for cleanout in July 1992. The volume of sediment was below the level requiring cleanout. Lagoon needs to be evaluated again for cleanout by July 1993, and a determination made.
4.11(a)	Implement a Best Management Practices (BMP) Plan after approval by Ohio EPA for control of wastes that may be discharged from the FEMP.	4/18/88	<b>ONGOING.</b> The Ohio EPA approved the BMP Plan on 7/10/89. Documentation for required actions is being reviewed to assure that all requirements of the plan has been satisfied. Followup actions are being identified based on this review.
4.11(b) DFO 11	Maintain BMP Plan.		<b>ONGOING.</b> FEMP revised the actions for implementation of the BMP Plan in order to remain consistent with the overall FEMP environmental protection program. The list of actions was transmitted to Ohio EPA on 8/28/89. As of 10/22/92, 32 of the 38 actions have been completed and their closeout documented. Steps are being taken to complete the remaining actions.

OHIO ENVIRONMENTAL PROTECTION AGENCY DIRECTOR'S FINDINGS AND ORDERS AND  
SECTION IV CONSENT DECREE  
QUARTERLY TECHNICAL PROGRESS REPORT

October 1 - December 31, 1992

Section II - Consent Decree

<u>Section</u>	<u>Activity</u>	<u>Due Date</u>	<u>Status</u>
4.11(c)	Amend BMP whenever there is a change in the facility which has the potential to affect the discharging of waste.		<b>AS REQUIRED.</b> No amendments were required during the reporting period. The BMP committee is initiating a review of the plan to determine what modifications are needed.
4.11(d) DFO 13	If requested by Ohio EPA, modify the BMP Plan within 45 days.		<b>AS REQUIRED.</b> No requests for modifications were received during the reporting period.
4.12	Modify the Zone of Influence Study Report within 30 days of Ohio EPA request.		<b>AS REQUIRED.</b> No requests for changes and/or additions to the report were received during the reporting period.
(DFO) 14(a)	Study the integrity of the FEMP outfall.		<b>COMPLETE.</b> A new effluent/outfall line will be installed as part of Removal Action 3 - South Groundwater Contamination Plume. This task is identified as part of the work plan for Part 2 of the South Plume Removal Action submitted to the Ohio EPA. The new outfall line is being designed to handle future FMPC capacity requirements.
4.14	Comply with any permits issued to DOE pursuant to ORC 6111.03 (J) with regard to sewage, industrial wastes, or other wastes, and to comply with OAC 3745-31-02 and any permits issued pursuant to OAC 3745-31-02.		<b>ONGOING.</b> One NPDES noncompliance (at an internal monitoring point) was reported during the September-November period.

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RCRA REGULATED HAZARDOUS WASTE

WASTE ID #	WASTE NAME	U.S. EPA HAZARDOUS WASTE #	DETERMINATION BASIS
12	AEROSOL PAINT CANS	D001	PK
24	SPENT CHLOROFORM	D022	PK
46	BARIUM CHLORIDE LIQUID HEAT 980	D005	PK
47	BARIUM CHLORIDE (LIQUID HEAT 800)	D005	PK
91	MERCURY SPILL CLEANUP RESIDUE	U151	PK
119	BARIUM CHLORIDE SOLUTION	D005	PK
157	WD-40 SPRAY CAN	D001	MSDS
160	SPEED E NAMEL SPRAY PAINT	D001	MSDS
162	KRYLON CAR COLOR SPRAY PAINT	D001	MSDS
163	AEROSOL PAINT	D001	MSDS
177	RAGS, GLOVES, PROTECTIVE COVERALLS, DOP, FORMULA 401	U107	MSDS
183	WATER/GAS MIXTURE TANK #8	D001 D008 D018	PK
194	COOLING TOWER SLUDGE	D037	PK
201	CRANKCASE OIL	D018	MSDS, PK
203	RAINWATER AND DIESEL FUEL	D018	PK
207	SUPER 77 SPRAY ADHESIVE	D001	MSDS
209	BARBASOL REGULAR SHAVING CREAM	D001	MSDS
220	MED. GREEN INDUSTRIAL SPRAY PAINT	D001	MSDS
222	AM SPRY STENCIL INK, BLACK	D001	MSDS
223	5311/5315 ENGINE STARTING FLUID	D001	MSDS
267	RAM PIT (UF4, MG, MGF2, OIL, OIL DRI)	D003 D018	PK
344	ITEK DEVELOPER (LIQUID)	D011	MSDS
376	OILY RAGS	D008 D018 F002	1,3,9
379	SPENT 1,1,1-TRICHLOROETHANE	D008 D018 F001 F002	MSDS, PK
380	RAGS WITH 1,1,1-TRICHLOROETHANE	D008 D018 F001 F002	1,3,7,8,9,11,12
381	AEROSOL PAINT CANS	D001	MSDS
382	DRY CELL BATTERIES	D002 D009	PK
383	X-RAY FIXER&DEVELOPER, CLEAR LIQUID MODERATE ACIDIC SOLUTION	D011	MSDS
385	SPENT SOLVENTS	D018 F001 F002	MSDS, 7,8
386	FLOOR SUMP CLEANOUT SLUDGE	D019 D034 F001 F002	1,2,4,7,8
387	OIL SOAKED RAGS	D010 D018 F002	MSDS, PK
388	USED OIL	D010 D018 F002	MSDS, PK
389	OILY RAGS	D008 D009 D010	1,3,8,9
390	OILY SEMI-SOLID	D018 F002	1,4,8,9
391	WASTE AEROSOL PAINT CANS	D001	MSDS
392	DRY CELL ELECTRONIC STORAGE BATTERIES	D002 D006 D009	PK
393	LUBRICATING OIL	D008	1,3,8,9
395	PAINT THINNERS AND PAINT RESIDUES	D001 F002 F003 F005	PK
396	PAINT THINNER RAGS	F002 F003 F005	PK
397	1,1,1-TRICHLOROETHANE (CLEANING SOLVENT)	D018 F001 F002	MSDS, PK
398	SOLVENT RAGS	D018 F001 F002	1,3,7,8,9,11,12
399	OILY RAGS	D008 D009 F001	1,3,9
400	USED OIL FROM MAINTENANCE	D001 D008 F001	MSDS, 1,4,7,8,9
401	SPENT 1,1,1-TRICHLOROETHANE	D018 F001 F002	PK
402	USED OIL	D008 D018 F001 F002	PK
403	1,1,1-TRICHLOROETHANE RAGS	D018 F001 F002	PK
404	OILY RAGS	D008 D018 F002	PK
405	DRY CELL BATTERIES	D002 D009	PK
406	AEROSOL CANS	D001	MSDS
408	USED OIL	D005 D006 D008 F001	1,3,7,8,9
409	1,1,1-TRICHLOROETHANE SOLVENT/OIL	D018 F001 F002	PK
410	OILY RAGS	D008 D018 F002	1,3,9
411	1,1,1-TRICHLOROETHANE SOLVENT RAGS	D018 F001 F002	PK
412	1,1,1-TRICHLOROETHANE	D001 D008 F001 F002	MSDS, 1,3,8,9
413	1,1,1-TRICHLOROETHANE RAGS	D008 D009 D039 F002	1,4,9
414	USED OIL	D001 D006 D008 D009 D039 F001 F002	1,4,7,8,9
415	OILY RAGS AND ABSORBENTS WD-40 AND VARIOUS OILS	D008 D018 F002	MSDS, PK
417	WIPES, RESINS, SOLIDS	D004 D005 D008 D022 F002 F003	PK
418	SPENT ACETONE	D001 F003	MSDS

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RCRA REGULATED HAZARDOUS WASTE

WASTE ID #	WASTE NAME	U.S. EPA HAZARDOUS WASTE #	DETERMINATION BASIS
419	XYLENE	D001 F003	MSDS, PK
420	SOLIDS - WIPES, RESINS, ETC.	D004 D005 D008 D022 F002 F003	PK
421	METHANOL	D001 F003	MSDS
422	SPENT METHYLENE CHLORIDE	F002	MSDS
423	ELEMENTAL MERCURY	D009	MSDS
425	LABORATORY ACIDS (NITRIC AND CYCLOHEXANE)	D001 D002	PK
426	METHANOL AND CYCLOHEXANE MIXTURE	D001 F003	MSDS
427	NICKEL-CADMIUM BATTERIES	D002 D006	PK
428	ACETONITRILE IN WATER	D001	MSDS
429	HG BATTERIES	D002 D009	PK
430	TRASH, CONTAMINATED	D005 D006 D007 D008 F003	PK
432	ELEMENTAL MERCURY (SPILL CLEAN-UP MATERIALS)	U151	PK
433	AEROSOL SPRAY CANS PROPELLANT	D001	MSDS
434	SOLIDS CONTAMINATED BY LAB SAMPLES & MATERIALS	D004 D005 D006 D007 D008 D022 F002 F003	PK
435	PAINT HYPALON COATING	D001	MSDS,PK
436	SEALANT POLYCHLOROPENE SOLUTION	D001	MSDS,PK
438	HYDRAULIC OIL FROM BALER IN DRUM RECONDITIONING	D018	1,3,4,5,7,8,9
444	SCRAP U308 & CHLORIDE SALT FROM TRENCH AROUND SALT BATH	D005	PK
447	LIQUID HYDRAULIC FLUID FROM FREIGHT ELEV. @ LAB BASEMENT	D018	PK
448	SLUDGE, HYDRAULIC OIL FROM FREIGHT ELEVATOR	D018	MSDS,PK
449	OIL SOAKED ABSORBENT PADS	D018	MSDS,PK
456	SLUDGE-LIKE, VERY STRONG SOLVENT ODOR	D018	PK
457	OIL	D018	PK
459	PAINT	D001 F001 F002 F003 F005	1,4,7,8,9
460	LIQUID & SOLID WASTE SAMPLES	D004 D005 D006 D007 D008 D010 D018 F002	1,3,7,8,9
468	OIL AND SOLVENTS W/ ANALYSIS	D001 D007 D008 D010 D018 F002	1,3,7,8,9
471	PRESSURE TREATED WOOD IN 8 DRUMS	D006	PK
473	ANTI-C PAPER COVERALLS & BOOTIES W/ LIME SLURRY	F001 F005	PK
476	LAB PACKED WATER AND RESIDUE SAMPLES	D007	2,4
478	CONTAMINATED OIL, SOLUBLE, FROM LATHE ON PLANT 64 PAD	D018	MSDS, PK
479	USED PAINT THINNER	D001 D006 D007 D008 D009 D011 D035 F003 F005	1,3,8,9
485	KEROSENE	D018	MSDS, PK
486	TETRACHLOROETHYLENE SPILL CLEANUP	U210	MSDS
487	RAIN WATER FROM UST #8 FORMERLY STORING GASOLINE	D008 D018	PK
493	STENCILED GASOLINE	D001 D018	1,3,7,8,9
507	GASOLINE	D001 D018	MSDS, PK
508	PAINT THINNER	D001	PK
514	BAD PAINT FROM PAINT BOOTH	D001 D007 D008 F001 F002 F003 F004	1,4,7,8,9
517	OIL DRY CONTAMINATED WITH OIL FROM BALER	D018	PK
520	PETROLEUM PRODUCT WITH RAIN WATER	D018	MSDS, PK
524	WATER	D001	1,4,5,7,8,9
527	OILY RAGS, CLEAN UP MATERIAL, GLASS JAR	D018 F002	PK
533	PAINT (POSSIBLY GRAY EPOXY PAINT)	D001	1,3,7,8,9
534	MEK MARKED ON DRUM BLUEDRUM FLAMMABLE	U159	MSDS, PK
538	BORING # 1508	D006 D007 D008	2,8,10,11,12
539	BORING # 1509	D004 D006 D007 D008	2,8,10,11,12
540	BORING # 1512	D004 D005 D006 D007 D008 D011	2,8,10,11,12
541	BORING # 1513	D005 D006 D007 D008	2,8,10,11,12
542	BORING # 1514	D004 D005 D006 D007 D008	2,8,10,11,12
543	BORING #1515, FROM THE FIRE TRAINING GROUNDS	D004 D005 D006 D007 D008	2,8,10,11,12
545	BORING # 1511	D004 D005 D006 D007	2,8,10,11,12
547	MISCELLANEOUS LEAD TOOLS PIPING, ETC...	D008	PK
548	LEAD - COUNTERWEIGHTS, BEARINGS	D008	PK
549	CUTTING FLUID, ABSORBANT	D018	MSDS, PK
580	SOIL CONTAMINATED WITH OIL AND WATER	D018	MSDS, PK
584	KEROSENE (DIESEL FUEL)/SLUDGE/WATER FROM PUMP UST #3	D018	PK
585	ZINC COMPOUND (AEROSOL)	D001	MSDS
587	GREASE AND WATER	D001	1,3,7,8,9
594	SODIUM HYPOSULFIDE - DEVELOPING SOLUTION (CONTAMINATED)	D011	MSDS, PK

## TABLE C - 1

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## RCRA REGULATED HAZARDOUS WASTE

WASTE ID #	WASTE NAME	U.S. EPA HAZARDOUS WASTE #	DETERMINATION BASIS
627	5-GAL CAN W/ SPILL CLEANOUT MATERIAL	F001	PK
628	SPILL CLEAN-UP MATERIALS	F001	PK
632	HYDRAULIC FLUID FROM BALER	D018	PK
633	OIL UNKNOWN GENERATION	D018	PK
634	BUFFERED KCN SOLUTION (ABOUT 2 LITERS @ 30 G PER LITER)	P098	PK
635	MERCURY SPILL CLEAN-UP AND SPENT MERCURY BATTERIES	D009	PK
638	USED OIL	D018	PK
639	OIL	D018	MSDS, PK
644	NON-RECOVERABLE TRASH, PADS, RAGS, WATER	D018	PK
658	CODED AS OIL - STRONG SOLVENT ODOR	D018	PK
659	LEAD AND WOOD SHAVINGS - UNKNOWN ORIGIN	D008	PK
661	BORING # 1594 - FROM NORTHWEST CORNER BLDG. 12	F001	2,4,9,12
668	OIL DRY CONTAMINATED WITH OIL AND WATER FROM BALER	D018	PK
674	DRY CELL BATTERIES, BUILDING 11	D002 D006 D009	PK
675	NON-EMPTY AEROSOL CANS, BUILDING 11	D001	MSDS
676	DRY CELL BATTERIES, BUILDING 12	D002 D006 D009	PK
677	NON-EMPTY AEROSOL CANS, BUILDING 12	D001	MSDS
696	KODAK ROYALPRINT ACTIVATOR	D002	MSDS,PK
697	ROYALPRINT STOP BATH	D002	MSDS,PK
700	MAGNESIUM FLAKE AND OILY RAGS	D003	PK
716	WASTE OILS	D008 D018	MSDS, PK
720	BORING #1261	F001	2,4,9,12
743	CONTAINER OF PUMP OIL AND RAGS	F001	PK
768	DAAP/SOLVESSO MIXTURE	D001	PK,1,4,8
769	PAINT	D001	MSDS
772	RESPIRATOR CANISTER	D007 D011	MSDS
776	BORING #1674, LOCATED INSIDE PILOT PLT ON NORTHWEST SIDE OF	F001	2,4,9,12
777	AGITENE	D001 D008 F001 F002	MSDS
778	CONTAMINATED OIL	D018	PK
817	PAINT CHIPS FROM SAND FILTERS AT WATER PLANT	D008	MSDS,4,9
819	BORING #1251	F001	2,4,9,11,12
820	LEAD ACID BATTERIES	D002 D004 D008	MSDS
826	METHYL ISOBUTYL KETONE, LABPACKED	D001 U161	PK
827	SODIUM AMIDE, STABILIZED AND LABPACKED	D003	PK
828	1,4-DIOXANE, STABILIZED, LABPACKED	D001 U108	PK
841	MERCURY SPILL CLEAN UP AND MERCURY BATTERIES	D002 D009 U151	PK
844	URANYL NITRATE SOLUTION IN TANKS	D002 D005 D007	PK
854	Ni Cd BATTERIES	D006	MSDS
855	MERCURY BATTERY	D009	MSDS
870	VARNISH - UNUSED	D001	MSDS
873	SPENT FIXER	D011	MSDS
874	LEAD BRICKS, LEAD WINDOW SASHINGS, BABBIT HAMMER	D008	PK
1080	CADMIUM SPRINGS	D006	4
1081	CADMIUM SPRINGS	D006	PK
1178	GROUNDWATER FROM WELL #2649	F002	2,4,7,9
1180	GROUNDWATER FROM WELL # 1031	F002	PK,1,3,7
1182	CLEAR DISPERSANT, TYPE H PREMIX - BLACK, CYAN, YELLOW & MAGENTA	D001	MSDS
1183	CLEAR DISPERSANT, TYPE H PREMIX, TYPE H CONCENTRATE	D001	MSDS
1184	CLEAR DISPERSANT, TYPE H PREMIX, TYPE H CONCENTRATE	D001	MSDS
1185	TYPE 028 FIX; CD-5 DEVELOPER	D011	MSDS
1199	MERCURY CONTAMINATED FLOOR TILE & PIPE INSULATION	D009	MSDS
1229	CONTAMINATED SUMP WATER	D001 D008 D018 D019 D039 D040 F002 F003	2,4,7,8,9,11
1251	FREON 11	U121	MSDS
1271	LEAD SOLDER JOINTS	D008	PK
1279	PLUTONIUM 239 SOLUTION	D002	PK,9
1281	LEAD BRICKS	D008	PK
1297	PC 49896 ITEK UNIVERSAL DEVELOPER	D011	MSDS,4
1298	ITEK PC 49907 ITEK INSTACOLOR ACTIVATOR	D002 D011	MSDS
1337	CONTAMINATED WATER NON CHLORIDE	D001	1,3,5,6,7,8,9

## TABLE C - 1

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## RCRA REGULATED HAZARDOUS WASTE

WASTE ID #	WASTE NAME	U.S. EPA HAZARDOUS WASTE #	DETERMINATION BASIS
1412	CONTAMINATED ORGANIC CHEMICAL OR SOLVENT	D001 D006 D008 F001 F002	1,3,7,8,9
1415	CONTAMINATED INSOLUBLE OIL	D001 F001 F002	1,3,5,6,7,8,9
1429	CONTAMINATED ORGANIC CHEMICAL SOLVENT	D001 D008 D018 D028 D035	1,3,5,6,7,8,9
1432	NON CHLORIDE CONTAMINATED WATER OR SUMP LIQUOR	D001	1,3,5,6,7,8,9
1447	NON CHLORIDE CONTAMINATED WATER OR SUMP LIQUOR	D001 D008 F003 F005	1,3,7,8,9
1501	SPILL CLEANUPS OF OIL AND GAS FROM GASOLINE ENGINES	D018	MSDS
1504	FLAMMABLE PAINTS AND PAINT RELATED PRODUCTS	D001	MSDS
1532	BIODENITRIFICATION SURGE LAGOON SLUDGE	D018 D039 F001 F002	2,4,7,9,11
1536	RAINWATER FROM WASTE PIT AREA	F001 F002	PK
1537	FILTER MATERIAL - SAND, GRAVEL, FLYASH	F001 F002	PK
1544	MAGNESIUM	D001 D003	PK
1550	URANIUM HEXAFLUORIDE AND URANIUM TETRAFLUORIDE	D003	MSDS
1560	BLACK OXIDE FROM CRUCIBLE BURNOUT	D004	MSDS
1575	URANYL NITRATE (UNH)	D001	PK
1585	LEAD ACID BATTERY (BROKEN)	D002 D008	MSDS
1589	RAFFINATES - NON-NEUTRALIZED	D001 D002	MSDS
1613	123 PROCESSOR CLEANER	D002	MSDS
1620	VEGITATION FROM THE ETF CLOSURE	F001 F002	PK
1665	ELECTROSTATIC MASTER LIQUID DEVELOPER	D001	MSDS
1667	ISOPROPYL ALCOHOL	D001	MSDS
1691	HYDROFLUORIC ACID	D002 U134	MSDS
1692	NITRIC ACID	D002	PK
1694	QC WATER BLANKS	D006 D009 D010 D011 D018 D039 D040	1,4,9
1705	LAB GENERATED WASTE, OIL FROM TCLP EXTRACTS	D001 D004 D006 D008 D010	1,3,7,8,9
1706	LAB WASTE, TCLP EXTRACT	F002 F005	1,4,7,8,9
1707	LAB GENERATED WASTE, ACID DIGESTS	D002 D007 D008 D019 D028 D039 F001 F002	2,4,7,8,9,11,12
1708	LAB GENERATED WASTE, METHYLENE CHLORIDE EXTRACTS	F002	2,4,7,8,9
1709	LAB GENERATED WASTE FLAMMABLE ORGANIC EXTRACTS	D001 D002 F003 F005	2,4,7,8,9
1710	ORGANIC LIQUID WASTE	D001 D010 F002	1,3,7,8,11,12
1711	METALS EXTRACTS AND DIGESTS	D002 D008 D009 D010 F001 F002 F005	1,3,7,8,11,12
1712	DIGEST FROM MERCURY LAB WASTE	D002 D008 D010	1,3,7,8,11,12
1713	OIL FROM TCLP EXTRACTS	D040 F001 F002 F005	1,3,8,11,12
1714	VOLATILE SOLID WASTE	D010	2,4,11,12
1715	CONTACT WASTE (LAB GENERATED WASTE)	D004 D008 D010	2,4,11,12
1716	LAB GENERATED WASTE, CONTACT WASTE SOLID	F001 F002 F005	1,4,11,12
1725	LUBRICATING OILS	D018	MSDS
1728	CRANKCASE OIL	D018	MSDS
1729	GASOLINE	D001 D008 D018	1,3,5-9
1731	LEAD	D008	PK
1737	HARDENER	D002	MSDS
1740	(DOP) DI OCTYL PHTHALATE	U107	PK
1751	SPENT FIXER	D011	MSDS
1764	MULTILITH BLANKROLA SOLVENT	D039	MSDS
1773	CONCENTRATE FIXER	D011	PK
1775	DEGLAZING SOLVENT	F002	MSDS
1789	UNH	D004 D006 D007 D008 D010	4,7,9,13
1799	USED MINERAL SPIRITS	D001 D018	MSDS
1815	SPENT FUELS	D001 D018	MSDS
1819	WHATMAN RAD-CON	D001	MSDS
1822	SPRAY ADHESIVE	D001	MSDS
1829	AEROSOL PAINT	D001	MSDS
1841	SOIL	F001 F002	PK,1,9,11
1842	GRASS ON THE SOIL	F001 F002	PK,1,9,11
1849	BUFFER SOLUTIONS PH 1 & 2	D002	MSDS
1856	UNKNOWN MATERIAL	F001 F002	1,4,9
1895	PAINT BRUSHES V/DRIED PAINT	D007 D008	PK
1904	CENOLLO E100 OVERNIGHT SPRAY	D001	MSDS
1922	LEAD SHIELDING FROM X-RAY SYSTEM	D008	PK
1927	METALS EXTRACTS AND DIGESTS (IGNITABLE) (LAB GENERATED WASTE)	D001 D002 D008 D009 D010 F001 F002 F003 F005	1,3,7,8,11,12

## TABLE C - 1

REVISED: 07-Jan-93

## RCRA REGULATED HAZARDOUS WASTE

WASTE ID #	WASTE NAME	U.S. EPA HAZARDOUS WASTE #	DETERMINATION BASIS
1928	COMPUBLEND CLEANING LIQUID (IGNITIBLE)		MSDS
1937	COMPUBLEND CLEANING LIQUID (CORROSIVE)		MSDS
1938	NON-CHLORIDE, CONTAM. WATER OR SUMP LIQUOR	D006 D007 D008 D010 F005	1,3,7,8,9
1946	SOIL CUTTINGS FROM OUTDOOR FIRING RANGE	D008	1,4,9,11
1969	FLAMMABLE AEROSOLS	D001	MSDS
1973	ETHOXYETHANOL, MIBK, METHOXYETHANOL 1,4 DIOXANE, ETHYL ETHER	D001 U108 U117 U161 U213 U359	PK
1974	ANYDROUS ETHER, STABILIZED	D001 U117	PK
1975	PVC PIPING FROM PLT 6 PERCHED WATER EXTRACTION PROJECT	F001	2,4,9,10,11,12
1987	LEAD/LEAD SEALS	D008	PK
1998	METHANOL AND CHCLOHEXANE	D001 F003	MSDS,PK
1999	NESSLER, REAGENT, COD DIGESTION SOLUTION ROCHELLE SALT	D002 D007 D009 D011	MSDS,PK
2006	CURING COMPOUND	D001	MSDS
2014	EPOXY-PRIME COAT LDC-1000	D001 D035	MSDS
2016	PAINT BITUMASTIC 300 M A & B COLD TAR COATING	D001 D018 D026	MSDS
2021	BARIUM CARBONATE	D005	MSDS
2024	PAINT	D005	MSDS
10002	SCRAP SALTS	D005 D008	1,4,9
10003	OILY OXIDATION SLUDGES WITH HIGH FREE METAL	D001 D039 F001	MSDS,1,4,7,8,9
10004	CONTAMINATED SOLVENT - TRICHLOR, PERCHLOR	D007 D018 D019 D021 D029 D039 D040 F001	1,4,7,8,9
10005	CONTAMINATED SOIL, ROCKS, BRICKS AND CERAMICS	D008	1,4,7,8,9
10006	CONTAMINATED OIL - INSOLUBLE	D008 D009 D039 F001	1,4,7,8,9
10007	OILY SLUDGES	D007 F001	1,4,7,8,9
10009	SLUDGES - SOLVENT (TRICHLOR, PERCHLOR, ETC.)	D001 D008 D035 F005	1,4,7,8,9
10010	SLUDGES, OILY	D029 D039 D040 F001	1,7,8,9
10011	CONTAMINATED BURNABLES	D005	1,4,9
10012	CONTAMINATED BURNABLES	D029 D039 D040 F001	1,4,9
10013	SUMP CAKE	D005 D007	1,4,7,9
10014	U-CONTAMINATED WATER	D039	1,4,7,8,9
10015	U-CONTAMINATED WATER FROM PILOT PLANT EXTRACTION AREA	D039	1,4,7,9
10016	OILY SLUDGE	D010 D035 F001	1,4,7,8,9
10017	LINERS/GLOVES CONTAM. WITH ROOFING CPD AND DIESEL FUEL	D007 D010	MSDS,1,4,9
10018	CONTAMINATED SOIL AND ROCKS	D005 D006 D007 D008 D009	1,4,9
10021	SLUDGES, OILY	D008 D039 D040 F001	1,4,7,8,9
10022	GRIT BLAST	D008	3,4,9
10023	NON-RECOVERABLE TRASH	D008 F001	1,3,10
10024	TRASH CONT. TO SOLVENT	D018 F001	1,4,9
10025	CONTAMINATED SOIL AND ROCKS	D005	4,9
10026	1,1,1-TRICHLOROETHANE STILL BOTTOMS	D001 F001	2,4,7,8,9
10027	CONTAMINATED OIL, INSOLUBLE	D039 D040 F001	1,4,7,8,9
10028	SLUDGES, OILY	D008 F001	2,4
10029	CONTAMINATED INSOLUBLE OIL	D006 D007 D008 D019 D029 D040 F001	1,4,7,8,9
10030	CONTAMINATED SOLVENTS (METHANOL)	D001 F003	PK
10031	FLOOR SUMP CLEANOUT SLUDGE	D029 D039 F001	1,4,7,8,9
10032	CONTAMINATED OIL, INSOLUBLE	F001	2,4
10034	BENZENE (LABPACKED)	D001 D018 U019	PK
10035	CARBON TETRACHLORIDE (LABPACKED)	D019 U211	PK
10036	ETHYL ETHER (LABPACKED)	D001 U117	PK
20009	DEGREASING SOLVENT	D001 D019 D022 D028 D029 D035 D039 D040 F001 F003 F005	1,2,4,9,11
20006	OIL CONTAMINATED WET SUMP OR FILTER CAKE	F002	1,4,7,8,9
20007	OIL CONTAMINATED WET SUMP OR FILTER CAKE	D011	1,4,7,9
20015	SCRAP SALTS AND FLOOR SWEEPINGS - LOW FLUORIDE	D007	1,4,9
20021	CONTAMINATED INSOLUBLE OIL	D019 D029 D039 D040 F001	1,2,4,7,8,9
20024	SCRAP SALTS AND FLOOR SWEEPINGS - HIGH FLUORIDE	D007 D008	1,4,9
20027	DUST COLLECTOR RESIDUES - HIGH FLUORIDE	D004 D011	2,4,9,11
20028	CONTAMINATED OIL - INSOLUBLE	D039 D040 F001	1,2,4,7,8,9,11
20031	CONTAMINATED OIL, INSOLUBLE GEAR OIL, LUBRICATING OIL	F002	1,2,4,7,8,9
20033	PROCESS RESIDUES, TRAILER CAKES, SLURRIES, RAFFINATES	D008	1,4,9,11
20035	DUST COLLECTOR RESIDUES - HIGH FLUORIDE	D007	4,9
20036	SCRAP SALTS AND FLOOR SWEEPINGS - LOW FLUORIDE	F001	2,4,9,11

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REVISED: 07-Jan-92

RCRA REGULATED HAZARDOUS WASTE

WASTE ID #	WASTE NAME	U.S. EPA HAZARDOUS WASTE #	DETERMINATION BASIS
20037	PROCESS RESIDUES, TRAILER CAKES, SLURRIES, RAFFINATES	D029	2,4,9,11
20038	CONTAMINATED OIL - INSOLUBLE	D006 D008 D018 D019 D028 D029 D039 D040 F002 F005	1,2,4,7,8,9,11
20045	CONTAMINATED TBP AND/OR KEROSENE MIXTURES AND SLUDGES	D019 D022 D039 F002	1,2,4,7,8,9,11
20046	NON-METALLIC MISCELLANEOUS SAMPLES	D007	1,3,9
20047	SCRAP SALTS AND FLOOR SWEEPINGS - LOW FLUORIDE	D004 D008	2,4,9,11
20048	PROCESS RESIDUES, TRAILER CAKES, SLURRIES, RAFFINATES	F005	1,4,9
20053	CONTAMINATED SOIL, ROCKS, BRICKS AND CERAMICS	D007 D011	1,4,9
20054	CONTAMINATED SOLVENT - TRICHLOR, PERCHLOR	D019 D022 D028 D029 D039 F001 F005	1,2,4,7,8,9
20055	CONTAMINATED OIL - INSOLUBLE	D029 D039 F002	1,2,4,7,8,9,11
20058	DUST COLLECTOR RESIDUES - HIGH FLUORIDE	D006 D008	1,4,9
20092	CONTAMINATED BURNABLES	F001 F005	1,4,9
20094	CONTAMINATED BURNABLES, RAGS, FILTER, CLOTH	D008 D011 F001	1,4,7,8,9
20095	CONTAMINATED BURNABLES - RAGS, PAPER, POLYETHYLENE	D011 F001 F005	1,4,9
20107	CONTAMINATED NON-BURNABLES	D008	1,4,9
20109	DUST COLLECTOR BAGS	D004 D006 D008	1,4,9
20114	CONTAMINATED BURNABLES	F001	1,4,7,8,9
20120	DUST COLLECTOR BAGS	D007	1,4,7,8,9
20139	SAMPLES, NON-METALLIC	D005	1,4,7,8,9
20142	CONTAMINATED TBP-KEROSENE	D001 D019 D022 D039 F002 F003	1,2,4,7,8,9,11
20143	NON-RECOVERABLE TRASH	D011	1,4,7,8,9
20145	WET SUMP OR FILTER CAKE, OIL CONTAMINATED	D002 D007	1,4,7,8,9
20151	CONTAMINATED BRICKS, SOIL, ROCKS, SAND, ETC.	D004 D008 D011	1,4,9
30004	INCINERATOR CINDERS	F001	1,4,9
30005	OILY SLUDGES	D001 D019 D039 D040 F001 F003 F005	1,4,7,8,9
30009	SCRAP SALTS AND FLOOR SWEEPINGS - HIGH FLUORIDE	D008	4,9
30010	WET SUMP OR FILTER CAKE - OIL CONTAMINATED	D039 D040 F002	1,7,8,9
30018	WET SUMP OR FILTER CAKE - NON-OILY, NON-HALIDE	D039 F002	1,4,7,9
30026	NON-OILY CLEANOUT SLUDGES FOR ROASTING	D039 F002	1,4,7,8,9
30027	CONTAMINATED SOIL, ROCKS, BRICKS AND CERAMICS	D004 D005 D007 D008 D010 D011	1,2,4,7,8,9
30033	CONTAMINATED SOLVENT - TRICHLOR, PERCHLOR	D001 D039 F003 F005	1,4,7,8,9
30034	OIL CONTAMINATED WITH SOLVENTS (TANK 5)	D018 F001	2,4,7,8,9
30036	DUST COLLECTOR RESIDUES - HIGH FLUORIDE	D006 D008	1,4,9
30037	PROCESS RESIDUES, TRAILER CAKES, SLURRIES, RAFFINATES	D039 F002	1,4,9
30039	CONTAMINATED ROCKS, SOIL, ETC., WITH NO FREE LIQUIDS	D011	1,2,4,7,8,9
30042	WET SUMP OR FILTER CAKE - NON-OILY, NON-HALIDE	D039 F002	1,4,9
30045	OILY SLUDGES, HIGH FREE METAL	D001	1,4,7,8,9
30046	NON-OILY CLEANOUT SLUDGES FOR ROASTING	D019 F001	1,4,7,8,9
30047	SOLVENT SLEDGE, TRICHLOR, PERCHLOR, ETC...	D007 D011	1,4,9
30051	NON-METALLIC MISCELLANEOUS SAMPLES	D001 D003	4
30053	PROCESS RESIDUES, TRAILER CAKES, SLURRIES, RAFFINATES	D006 D007 D008 D018 D040 F002 F005	1,4,9
30060	WET SUMP OR FILTER CAKE - NON-OILY, NON-HALIDE	D005	1,4,9
30065	CONTAMINATED NON-BURNABLES	D008	4,9
30074	CONTAMINATED NON-BURNABLES	F002	1,4,5,6,7,8,9
30075	CONTAMINATED NON-BURNABLES	F002	1,4,9
30080	CONTAMINATED SOIL, ROCKS, DEBRIS, W/ FREE LIQUIDS	D002 D004 D007 D008 D011	1,2,4,7,8,9
30081	DISCARD PROCESS RESIDUES, TRAILER CAKES, SLURRIES, RAFFINATES	D002	1,4,9
30174	CONTAMINATED NON-BURNABLES	D004 D008 D011 F005	1,4,5,6,7,8,9
40122	THORIUM TRAILER CAKES; WASTE SLURRIES	D002 D005 D009	1,3,8
40137	UNFIRED REDUCTION CHARGES PLUS CaF2	D001	MSDS, PK
40152	SCRAP THO2 - HIGH F	D005	4,5
40181	THORIUM NITRATE SOLUTION	D001 D002 D007 D008	PK
40182	THORIUM NITRATE SOLUTION	D001 D002 D007 D008	PK
40185	IMPURE THORIUM NITRATE (SOLID)	D001 D007 D008	PK
40186	IMPURE THORIUM NITRATE (SOLID)	D001 D007 D008	PK
40187	IMPURE THORIUM NITRATE (SOLID)	D001 D007 D008	PK
40188	IMPURE THORIUM NITRATE (SOLID)	D001 D007 D008	PK
40189	IMPURE THORIUM NITRATE (SOLID)	D001 D007 D008	PK
50002	NON-RECOVERABLE TRASH	D001 F003 F005	1,4,7,8,9
50008	SUMP CAKE - COPPER CONTAMINATED	D001	1,4,9

RCRA REGULATED HAZARDOUS WASTE

WASTE ID #	WASTE NAME	U.S. EPA HAZARDOUS WASTE #	DETERMINATION BASIS
50010	NON-RECOVERABLE TRASH	F002 F005	1,4,7,8,9
50014	NON-RECOVERABLE TRASH	D019 F002	1,4,7,8,9
50022	CONTAMINATED WATER	D001 F003	1,4,7,8,9
50025	CONTAMINATED GRAPHITE	F001 F002	9
50031	CONTAMINATED METALLIC FILTER ELEMENTS	D008 D010	1,4,8,9
50036	CONTAMINATED BURNABLE	D007 F002	1,4,9
50058	DUST COLLECTOR BAGS	D007	1,4,9
50061	DUST COLLECTOR BAGS	D008	1,4,9
50063	ROASTED MG F2/OTHER MATERIAL	D004 D008	1,4,9
50068	NON-OILY SLUDGE FOR ROASTING	D001	1,4,7,8,9
50070	NON-OILY SLUDGE FOR ROASTING	D008 F001 F002	1,4,7,8,9
50071	SOLVENT SLUDGE	D001 D007	1,4,8,9
50072	CONTAMINATED SUMP WATER AND HYDRAULIC OIL	D001 D008 D019 D039 D040 F001 F003 F005	1,4,7,8,9
50079	INCINERATOR CINDERS	F002	4,9
50085	WET CAKE, NON-OILY/HALIDE	D001 F002 F003 F005	1,4,7,8,9
50089	CONTAMINATED MAGNESIUM	D001 D003	9
50090	CONTAMINATED MAGNESIUM	D001 D003	9
50091	DUST COLLECTOR RES. - PYROPHORIC	D004 D008	4,9
50095	CONTAMINATED INSOLUBLE OIL	D007	1,4,7,8,9
50096	NONRECOVERABLE TRASH	D001 D007 F003	1,4,7,8,9
50098	CONTAMINATED SOIL, ROCKS, BRICKS AND CERAMICS	D008	1,4,9
50100	COPPER CONTAMINATED SUMP CAKE - LOW U	F001	1,4,9
50101	DISCARD PROCESS RESIDUES	D039 D040 D043 F002	2,4,9,11,12
50102	PROCESS RESIDUES, TRAILER CAKES, SLURRIES, RAFFINATES	D008 D008	1,4,9
50113	ROASTED CALCIUM-PRECIPIATED SUMP AND FILTER CAKES	F001	1,4,9
50129	SCRAP U308 - LOW F	F001	4,9
50131	SCRAP U308 - LOW F	F002	9
50139	U308, +8MESH, LOW F	D039	1,4,9
50148	SCRAP U308 HIGH F	D004	1,4,7,8,9
50152	SCRAP U308 OR THO2, HIGH FLUORIDE	F002	9
50154	ROASTED CALCIUM-PRECIPIATED SUMP OR FILTER CAKES	F001	1,4,9
50165	ROASTED OFF-SITE SUMP CAKE	D007	4,9
50169	NON-OILY SLUDGE FOR ROASTING	D007	1,4,9
50170	SALT SLUDGE FOR PLANT 8	D004 D019 D039 F002	1,4,9
50173	SALT SLUDGE, CHLORIDE	D007	1,4,7,8,9
50174	SALT SLUDGE, CHLORIDE	D007	4,6,7,8,9
50175	SALT SLUDGE, CHLORIDE	F002	1,4,7,8,9
50177	FURNACE SALT, NON CHLORIDE	D004 D008	4,7,8,9
50178	FURNACE SALT, NON-CHLORIDE	D001	4,7,8,9
50180	FURNACE SALT, NON-CHLORIDE	D007 D008 D010	1,4,9
50183	SCRAP SALTS, LOW F	F001	1,4,9
50185	SCRAP SALT, HIGH F	D009	4,9
50188	SCRAP SALTS, HIGH F	D004 D007 D008 D010	1,4,9
50197	SLUDGES FOR BLENDING	D007	1,2,6,7,8,9
50200	OILY SLUDGE FOR OXIDATION	D001 F001	1,4,7,8,9
50202	OILY SLUDGE FOR OXIDATION	D001 D010	1,4,7,8,9
50203	OILY SLUDGE FOR OXIDATION	D008	1,4,7,8,9
50204	OILY SLUDGE FOR OXIDATION	D001 D010	1,4,7,8,9
50293	U308 FOR REOXIDATION	D004	4,9
50314	SCRAP SALTS AND FLOOR SWEEPINGS - HIGH FLUORIDE	D010	1,4,9
50323	SOLIDIFIED FURNACE SALTS - NON-CHLORIDE	D004	4,7,8,9
50339	SLUDGES, OILY, FOR OXIDATION, HIGH FREE METAL	F002	1,4,7,8,9
50346	OILY SLUDGE FOR OXIDATION	D001	1,4,7,8,9
50347	DISCARD PROCESS RESIDUE	D001	1,4,7,8,9
50349	DUST COLLECTOR RES. - HIGH F	D008	1,4,9
50351	DUST COLLECTOR RESIDUES - HIGH FLOURIDE	D004 D008	4,7,8,9
50355	DISCARD PROCESS RESIDUE	D001	1,4,7,8,9
50358	CONTAMINATED NON-BURNABLE	D001	1,4,7,8,9
50359	NON-RECOVERABLE TRASH	F002	1,4,6,9

## TABLE C - 1

REVISED: 07-Jan-9

## RCRA REGULATED HAZARDOUS WASTE

WASTE ID #	WASTE NAME	U.S. EPA HAZARDOUS WASTE #	DETERMINATION BASIS
50361	NON-RECOVERABLE TRASH	D009	5
50364	U3O8, +8MESH, LOWF	D007 F001 F002	4,5,9
50367	NON-RECOVERABLE TRASH	D008	9
50387	SLT SLUDGE, CHLORIDE	D005	4,9
50405	NON-RECOVERABLE TRASH	D006 D007	4,5,6,7,8,9
50406	FURNACE SALT, CHLORIDE	D004 D011	4,5,9
50407	NON-RECOVERABLE TRASH	D001	1,3,5,6,8,9
50408	FURNACE SALT NON-CHLORIDE	D008 D010	4,7,8,9
60011	NONRECOVERABLE TRASH	D007	MSDS,PK,1,5,9
60068	CONTAMINATED INSOLUBLE OIL	D008 F001	1,4,7,8,9
60069	CONTAMINATED INSOLUBLE OIL	D008 F001	1,4,7,8,9
60119	SLUDGES, OILY, FOR OXIDATION HIGH FREE METAL	D001 F001 F002	1,2,4,5,6,7,8,9
60123	SOLVENT SEMISOLID	D039 F002	1,2,4,5,6,7,8,9
60149	U3O8 FROM BOX FURNACE	F001 F002	1,4,9
60152	U3O8 ROTEXED PLANT & FURNACE PRODUCT	F001 F002	1,4,9
60331	WATER\GAS MIXTURE TANK #9	D001 D018	1,4,7,8,9
60332	WATER\GAS MIXTURE TANK #10	D008 D018	PK

## Key to "Determination Basis Codes" :

PK Process Knowledge  
MSDS Material Safety Data Sheet

## ANALYSES:

- |                                    |                               |
|------------------------------------|-------------------------------|
| 1 Total Volatile Organic           | 8 Flash Point                 |
| 2 TCLP Volatile Organic            | 9 U-Total, % U235             |
| 3 Total (TC) Metals                | 10 PCBs                       |
| 4 TCLP Metals                      | 11 Total Semivolatile Organic |
| 5 Visual Inspection of Waste       | 12 Total Pesticides           |
| 6 Paint Filter Liquids Test (PFLT) | 13 Total Thorium              |
| 7 pH                               |                               |