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**COMPLETION OF SAMPLING AND ANALYSIS OF  
8000 DRUMS AFFECTED BY THE HAZARDOUS  
WASTE MANAGEMENT UNIT REVIEW**

**07/30/91**

**DOE-1946-91  
DOE-FSO/OEPA  
8  
LETTER**



**Department of Energy**

Fernald Site Office  
 P.O. Box 398705  
 Cincinnati, Ohio 45239-8705  
 (513) 738-6319

1899

**JUL 30 1991**  
 DOE-1946-91

Mr. Paul Pardi, Group Leader  
 Solid and Hazardous Waste Management Unit  
 Ohio Environmental Protection Agency  
 40 South Main Street  
 Dayton, Ohio 45402

Dear Mr. Pardi:

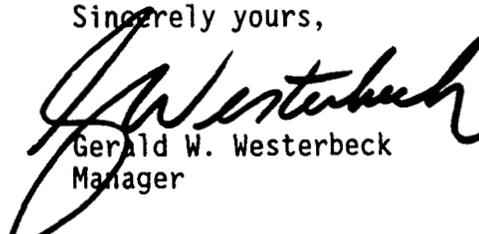
**COMPLETION OF SAMPLING AND ANALYSIS OF 8000 DRUMS AFFECTED BY THE HAZARDOUS WASTE MANAGEMENT UNIT REVIEW**

Enclosed is the summary chart for sampling and analysis and process knowledge review of the 8,000 drums affected by the Hazardous Waste Management Unit Review. These streams were evaluated as required in paragraph 3.5.1(b)(ii) of the Proposed Amended Consent Decree between the Ohio EPA and the Department of Energy.

The enclosed chart provides a summary of the characterization of the referenced drums, including their RCRA status. During this characterization effort, approximately 11,000 drums were examined. To date, two drums represented by Sampling Plans 126 and 127 could not be located. These drums will continue to be included in the HWMUR process. OEPA will be notified once the drums are located and characterized. Sampling Plans 45A-E were recombined into one stream after reviewing the sampling and analysis data. Sampling Plans 43, 84, 86, and 634 were split due to the variances between lots.

If you have any questions, please contact David Rast at (513) 738-6322.

Sincerely yours,

  
 Gerald W. Westerbeck  
 Manager

Enclosure: As stated

cc w/o encl.:

R. P. Whitfield, EM-40, FORS  
K. A. Hayes, EM-424, GTN  
C. A. McCord, USEPA-V, 5HR-12  
G. E. Mitchell, OEPA-Dayton  
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R. L. Glenn, Parsons  
AR Files

# 8000 DRUMS AFFECTED BY HWMUR SUMMARY CHART

Plan No.	Mat. Type	Source Code	Drum Count	Lot	Material Description	Non		EPA Hazardous Waste #	LDR		Weight (lbs.)	Physical State
						RCRA	RCRA		Status	Location		
1	069	658	2539	89	Wet sump or filter cake	X			a	1	983134	S/L
4	143	826	5492	94	Roasted sump and filter cakes	X			h	1, 6	1539044	S
7	062	512	1175	90	Dust collector residues - High F	X			h	6, 9	512265	S
9	033	240	536	36	Incinerator cinders		X	F001	b	1	143878	S
19	039	853	79	2	Oily semi-solids							
20	011	245	77	1	Contaminated rocks, soil, etc.	X		F001, F003, F005, D001, D019, D039, D040	a,b,c,f,g	RCRA	34239	S/L
22	065	822	65	5	Scrap salts, high fluoride	X			a	1	37404	S/L
23	163	112	63	1	Roasted, milled sump cake	X			h	1	29093	S
26	065	100	51	3	Scrap salts, high fluoride		X		h	1	34515	S
28	068	735	55	6	Wet sump or filter cake, oil cont'd	X		D008	f	1	16494	S
30	125	560	36	4	Slag, ball mill product	X		F002, D039, D040	b,c,g	RCRA	20560	S/L
32	058	827	33	1	Contaminated CaF2-MgO		X		h	1	32626	S
34	062	822	31	3	Dust collector residues - High F		X		h	1	8982	S
36	011	260	30	8	Contaminated rocks, soil, etc.	X			h	1, 8	16944	S
37	036	518	25	1	MgF2, high free metal	X			a	1, Refinery	15909	S/L
39	033	112	24	2	Incinerator cinders	X			h	1	15025	S
41	021	518	21	2	Drum decontam residues - MgF2		X		h	1	6191	S
43(s)	069	381	21	1	Wet sump or filter cake		X	F002, D039	a	1	12965	S/L
43(w)	069	381	2	1	Wet sump or filter cake		X		a,b,g	1	7112	S/L
44	065	800	20	1	Scrap salts, high fluoride		X		a	1	682	L
45	011	400	31	5	Contaminated rocks, soil, etc.		X		h	8	25293	S
							X		a	1	143730	S/L

**Key:** "PLAN NO." - Some plans divided into (s)olids, (l)iquids, and (w)ater  
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 "NON-RCRA" - Not regulated under RCRA Subtitle C  
 "LDR STATUS" - See "Key To Land Disposal Restrictions" on final page  
 "LOCATION" - 1, 2, 3, etc. = Plant Number; PP = Pilot Plant; LAB = Laboratory  
 RCRA = Approved RCRA Warehouses; THOR = Thorium Storage

**PHYSICAL STATE:**  
 S = Solid  
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# 8000 DRUMS

AFFECTED BY HWMUR  
SUMMARY CHART

Plan No.	Mat. Type	Source Code	Drum Count	Lot	Material Description	Non		EPA Hazardous Waste #	LDR Status	Location	Weight (lbs.)	Physical State
						RCRA	RCRA					
46	007	112	18	1	Trailer cakes, slurries, etc.		X	.	h	1	6977	S
49	011	200	18	6	Contaminated rocks, soil, etc.		X	.	a	1, RCRA	9671	S/L
50	042	742	15	4	Cleanout sludges		X	.	a	1	5872	S/L
54	011	742	13	2	Contaminated rocks, soil, etc.		X	.	h	1	5575	S
60	062	524	11	5	Dust collector residues - High F		X	.	h	1	5177	S
62	042	200	29	13	Cleanout semi-solids	X		F002, D039	a,b,g	2	9200	S/L
63	011	212	9	2	Contaminated rocks, soil, etc.	X		D004, D005, D007, D008, D010, D011	a,f	1	6486	S/L
65	038	824	9	2	MgF2, +20 mesh, low U		X	.	h	1	5039	S
67	011	235	8	1	Contaminated rocks, soil, etc.		X	.	a	1	4731	S/L
69	042	643	8	1	Cleanout semi-solids		X	.	a	1	5090	S/L
71	067	980	8	3	Wet sump or filter cake		X	.	a	1	2407	S/L
72	042	900	6	1	Cleanout semi-solids		X	.	a	1	1426	S/L
75	013	745	17	10	Contaminated solvent	X		F003, F005, D001, D039	a,b,f,g	RCRA	5603	S/L
76	015	741	96	14	Contaminated oil, insoluble	X		F001, D018	a,b,g	RCRA	32140	L
78	042	940	2	1	Cleanout semi-solids		X	.	a	1	874	S/L
80	062	665	5	5	Dust collector residues - High F	X		D006, D008	f	1	1242	S
83	001	381	4	1	Discard process residues, etc.	X		D039, F002	a,b,g	1	1097	S/L
84(S)	001	235	3	1	Discard process residues, etc.		X	.	h	1	2302	S
84(I)	001	235	1	1	Discard process residues, etc.	X		D002	a,c,f	1	910	S/L
86(S)	011	211	3	3	Contaminated rocks, soil, etc.	X		D011	f	1	525	S
86(I)	011	211	1	1	Contaminated rocks, soil, etc.	X		D002, D004, D007, D008, D011	c,f	1	1007	L

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						RCRA	RCRA		Status	Location		
87	011	300	3	2	Contaminated rocks, soil, etc.	X	X	.	h	1	2909	S
90	020	920	4	1	Contaminated merco-dri & hilco cake	X	X	.	a	RCRA	1587	S/L
92	069	380	4	1	Wet sump or filter cake	X		F002, D039	b,c,g	1	1401	S
93	001	200	3	1	Discard process residues, etc.	X	X	.	a	1	1351	S/L
96	038	800	3	2	MgF2, +20 mesh, low U	X	X	.	h	1	868	S
98	041	655	26	6	Oily sludges, high free metal	X		D001	a,f	1	20702	S/L
99	042	741	10	3	Cleanout semi-solids	X	X	F001, D019	a,b,g	RCRA	4105	S/L
100	043	732	1	1	Solvent semi-solids	X	X	D007, D011	f	RCRA	79	S
104	001	210	1	1	Discard process residues, etc.	X	X	.	h	1	183	S
105	001	246	2	1	Discard process residues, etc.	X	X	.	h	1	255	S
106	011	210	2	1	Contaminated rocks, soil, etc.	X	X	.	a	1	1164	S/L
109A	047	140	1	2	Samples, non-metallic, misc.	X		D001, D003	f	1	16	S
109B	047	140	1	1	Samples, non-metallic, misc.	X	X	.	h	1	154	S
111	058	512	2	1	Contaminated CaF2-MgO	X	X	.	h	1	419	S
114	001	660	1	1	Discard process residues, etc.	X	X	D006, D007, D008, D018, D040, F002, F005	b,f,g	1	152	S
119	011	655	1	1	Contaminated rocks, soil, etc.	X	X	.	h	1	317	S
123	032	732	1	1	Incinerator ashes	X	X	.	h	1	1	S
126	041	660	1	1	Oily semi-solids, high free metal			See Cover Letter	.	.	.	.
127	041	611	1	1	Oily semi-solids, high free metal			See Cover Letter	.	.	.	.
130	062	530	1	1	Dust collector residues - High F	X	X	.	h	1	110	S
134	068	200	1	1	Wet sump or filter cake, oil cont'd	X	X	.	a	1	584	S/L

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						RCRA	RCRA					
135	069	362	2	2	Wet sump or filter cake	X		D005	f	RCRA, THOR	565	S
143	029	512	117	30	Dust collector bags		X		h	1	7936	S
146	029	520	75	16	Dust collector bags		X		h	1	5558	S
148	029	513	63	27	Dust collector bags		X		h	1	3985	S
150	029	530	46	9	Dust collector bags		X		h	1	1796	S
155	028	200	31	2	Contaminated non-burnables	X		D008	f	1, RCRA	15081	S/L
157	029	535	27	6	Dust collector bags		X		h	1	1841	S
159	027	658	29	21	Contaminated burnables		X		h	1	4642	S
160	026	311	24	12	Contaminated carbon filter elements		X		h	1, RCRA	4177	S
165	026	310	15	6	Contaminated carbon filter elements		X		h	1, RCRA	3197	S
167	029	560	13	12	Dust collector bags		X		h	1	1212	S
208	029	533	2	2	Dust collector bags		X		h	1	142	S
209	029	536	13	2	Dust collector bags		X		h	1	1778	S
218	027	100	3	2	Contaminated burnables		X		h	1	53	S
222A	028	100	4	1	Contaminated non-burnables	X		F002	b	1, RCRA	2508	S
222B	028	100	1	1	Contaminated non-burnables	X		D004, D008, D011, F005	b,f	1, RCRA	13	S
222C	028	100	4	1	Contaminated non-burnables		X		a	1, RCRA	618	S/L
222D	028	100	11	5	Contaminated non-burnables		X		h	1, RCRA	392	S
223	028	210	1	1	Contaminated non-burnables	X		F002	b	1	40	S
225	025	227	1	1	Contaminated non-burnables		X		h	1	80	S

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## SUMMARY CHART

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						RCRA	RCRA					
231	029	510	1	1	Dust collector bags		X	.	h	1	90	S
634	003	200	1	1	Non-recoverable trash		X	.	h	1	249	S
634	028	200	22	3	Contaminated Asbestos		X	.	h	1	10650	S
Total Drums:			11266									
Total "RCRA" Drums:			989									
Total "RCRA" Streams:			25									

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**SUMMARY CHART**

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**KEY TO LAND DISPOSAL RESTRICTIONS DESIGNATED IN "LDR STATUS" COLUMN**

General Comments:

- All material designated as "RCRA" is classified as Radioactive Mixed Waste. This material is subject to land disposal restrictions as part of the "Third Third" listed wastes. There is a two year national capacity variance for Radioactive Mixed Wastes which expires on May 8, 1992.

Codes:

- (a) Any material containing liquids is prohibited from land disposal irrespective of it's status as a RCRA Hazardous Waste.
- (b) Solvent Ban; effective November 8, 1986.
- (c) California List; effective July 8, 1987.
- (d) First Third wastes; effective August 8, 1988.
- (e) Second Third wastes; effective August 8, 1989.
- (f) Third Third wastes; effective May 8, 1990.
- (g) TC Organics D019 - D043; No LDRs apply. No treatment standards set.
- (h) Not restricted from land disposal.