

US EPA ARCHIVE DOCUMENT

	B	C
1	Source Description	
2		
3	Phase I ID No.	210
4	EPA ID No.	KYD088438817
5	Facility Name	LWD, INC.
6	Facility Location	
7	City	CALVERT CITY
8	State	KY
9	Unit ID Name/No.	UNIT NO. 3
10	Other Sister Facilities	None
11	Number of Sister Facilities	0
12	Combustor Class	Commercial incinerator
13	Combustor Type	Rotary Kiln
14	Combustor Characteristics	Kiln: 12.5' diameter, 24' long. Afterburner used.
15	Capacity (MMBtu/hr)	
16	Soot Blowing	
17	APCS Detailed Acronym	SD/FF/PT
18	APCS General Class	FF, LEWS
19	APCS Characteristics	Spray dryer, fabric filter (teflon coated bags, 45,000 ft2 cloth area, 4.5 A/C), packed tower (Raschig rings, 1800 gpm liquor)
20	Hazardous Wastes	Liq, sludge, solid
21	Haz Waste Description	
22	Supplemental Fuel	
23		
24	Stack Characteristics	
25	Diameter (ft)	8.0
26	Height (ft)	150.0
27	Gas Velocity (ft/sec)	7.8
28	Gas Temperature (°F)	162.3
29		
30	Permitting Status	
31	HWC Burn Status (Date if Terminated)	

	B	C
1	Condition Description	
2		
3	210C1	
4		
5	Report Name/Date	Stationary Source Sampling Report, Reference No. 10816, LWD Inc., Calvert City, KY, Unit No. 3, January 1993
6	Report Prepare	Entropy
7	Testing Firm	Entropy
8	Cond Descr	Trial burn
9	Testing Dates	January 19-21, 1993
10	Cond Dates	Jan-93
11		
12	210C2	
13		
14	Report Name/Date	Stationary Source Sampling Report, Reference No. 12563, LWD, Calvert City, KY, Unit No. 3, January 1994
15	Report Prepare	Entropy
16	Testing Firm	Entropy
17	Cond Descr	Trial burn
18	Testing Dates	January 1-5, 1994
19	Cond Dates	Jan-94

	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Stack Gas Emissions 2												
2													
3													
4	210C1					R1		R2		R3		Cond Avg	
5													
6	PM	E1	gr/dscf	y		0.0184		0.0051		0.0018		0.0084	
7	HC	E1	ppmv	y		8.8		4.9		2.3		5.3	
8	HCl	E1	ppmv	y		27.4		13.3		5.7		15.4	
9	Cl2	E1	ppmv	y	nd	0.1	nd	0.1	nd	0.1		0.1	
10	Total Chlorine	E1	ppmv	y	1	27.7	2	13.5	4	5.9	2	15.7	
11													
12	1,2-dichlorobenzene	E2	%			99.9959		99.9998		99.9998			
13	Hexachloroethane	E2	%			99.9987		99.9997		99.9997			
14													
15	Sampling Train	PM, HCl/Cl2	E1										
16	Stack Gas Flowrate		dscfm			67308.0		62250.0		64258.0		64605.3	
17	O2		%			16.2		15.3		15.0		15.5	
18	Moisture		%			26.6		27.5		27.4		27.2	
19	Temperature		°F			153.0		154.0		153.0		153.3	
20													
21	Sampling Train	SVOC	E2										
22	Stack Gas Flowrate		dscfm			67360.0		63714.0		66113.0		65729.0	
23	O2		%			16.2		15.3		15.0		15.5	
24	Moisture		%			24.6		27.0		25.9		25.8	
25	Temperature		°F			150.0		153.0		151.0		151.3	
26													
27	210C2					R1		R2		R3		Cond Avg	
28													
29	PM	E1	gr/dscf	y		0.0052		0.0125		0.0027		0.0068	
30	CO	E1	ppmv	y		0.2		0.8		0.4		0.4	
31	HC	E1	ppmv	y		3.1		2.8		1.6		2.5	
32	HCl	E1	ppmv	y		53.9		61.3		44.0		53.1	
33	Cl2	E1	ppmv	y		0.3		0.8		0.5		0.5	
34	Total Chlorine	E1	ppmv	y		54.5		62.8		45.0		54.1	
35													
36	1,2-dichlorobenzene	E2	%			99.9998		99.9998		99.9998			
37	Hexachloroethane	E2	%			99.9998		99.9998		99.9998			
38													
39	Sampling Train	PM, HCl/Cl2	E1										
40	Stack Gas Flowrate		dscfm			47498.0		49225.0		47370.0		48031.0	
41	O2		%			13.7		13.6		13.3		13.5	
42	Moisture		%										
43	Temperature		°F			163.0		162.0		163.0		162.7	
44													
45	Sampling Train	SVOC	E2										
46	Stack Gas Flowrate		dscfm			47464.0		47828.0		47918.0		47736.7	
47	O2		%			13.7		13.6		13.3		13.5	
48	Moisture		%										
49	Temperature		°F			162.0		162.0		162.0		162.0	

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB		
1	Feedstreams 2																												
2																													
3	210C1																												
4		R1	R2		R3		R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2		R3
5	Feedstream Number	F1	F1		F1		F2		F2		F2		F3		F3		F3		F4		F4		F4		F4		F4		
6	Feed Class	Liq HW	Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Sludge		Sludge		Sludge		Solid non-HW		Solid non-HW		Solid non-HW		Solid non-HW		Solid non-HW		
7	Feed Class 2																		Non-HW		Non-HW		Non-HW		Non-HW		Non-HW		
8	Feedstream Description	Aqueous	Aqueous		Aqueous		Organic		Organic		Organic		Sludge		Sludge		Sludge		Packaged		Packaged		Packaged		Packaged		Packaged		
9	Feed Rate	lb/hr	4708		4780		4697		2038		2678		2373		1512		1507		1517		1743		1761		1761		2503		
10	Heating Value	Btu/lb					61.28		65.27		66.41		9341		9699		9485		1749		5525		5775		5775		5775		
11	Ash	wt %	0.1		0.1		0.1		7.73		7.76		9.03		61.58		57.74		52.42		94.93		88.24		88.24		88.71		
12	Chlorine	ppmw	197536		228033		107941		120216		110904		112937		218254		228932		243243		29948		31687		31687		34479		
13																													
14	Stack Gas Flowrate	dscfm	67308		62250		64258		67308		62250		64258		67308		62250		64258		67308		62250		64258		64258		
15	Oxygen	%	16.2		15.3		15		16.2		15.3		15		16.2		15.3		15		16.2		15.3		15.3		15		
16																													
17	<i>Feedrate MTEC Calculations</i>																												
18	Ash	mg/dscm	55		50		46		1825		2192		2080		10788		9180		7721		19171		16393		16393		21558		
19	Chlorine	ug/dscm	10775098		11498958		4922386		2838601		3133202		2601972		3823422		3639578		3582565		604796		588662		588662		837874		
20																													
21	210C2																												
22		R1	R2		R3		R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2		R3
23	Feedstream Number	F1	F1		F1		F2		F2		F2		F3		F3		F3		F4		F4		F4		F4		F4		
24	Feed Class	Liq HW	Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Sludge		Sludge		Sludge		Solid non-HW		Solid non-HW		Solid non-HW		Solid non-HW		Solid non-HW		
25	Feed Class 2																		Non-HW		Non-HW		Non-HW		Non-HW		Non-HW		
26	Feedstream Description	Aqueous	Aqueous		Aqueous		Organic		Organic		Organic		Sludge		Sludge		Sludge		Packaged		Packaged		Packaged		Packaged		Packaged		
27	Feed Rate	lb/hr					2994		3762		3112		1612		1563		1519												
28	Heating Value	Btu/lb					16066		10702		16384		10951		10851		9757												
29	Ash	lb/hr	1.93		1.49		0.366		58		177		242		216		592		572		1887		1584		1584		1873		
30	Chlorine	lb/hr	646		737		638		287		286		312		416		418		381		94		93.7		93.7		93.8		
31																													
32	Stack Gas Flowrate	dscfm	47498		49225		47370		47498		49225		47370		47498		49225		47370		47498		49225		47370		47370		
33	Oxygen	%	13.7		13.6		13.3		13.7		13.6		13.3		13.7		13.6		13.3		13.7		13.6		13.6		13.3		
34																													
35	<i>Feedrate MTEC Calculations</i>																												
36	Ash	mg/dscm	21		15		4		626		1819		2484		2332		6083		5870		20371		16277		16277		19222		
37	Chlorine	ug/dscm	6973977		7573493		6547459		3098346		2938968		3201892		4490982		4295414		3910003		1014789		962872		962872		962620		

	B	AQ	AD	AF	AG	AH	AI	AJ	AK	AL	AN	AO	AP	AQ	AR	AS	AT	AU	AV
1	Feedstreams :																		
2																			
3	210C1		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3					Cond Avg
4																			
5	Feedstream Nt		F5	F5	F5							F6	F6	F6					F6
6	Feed Class		Solid HW	Solid HW	Solid HW							Total	Total	Total	Total	Total	Total	Total	Total
7	Feed Class 2					HW	HW	HW				Total	Total	Total	Total	Total	Total	Total	Total
8	Feedstream Dr		Bulk Solids	Bulk Solids	Bulk Solids							Total	Total	Total	Total	Total	Total	Total	Total
9	Feed Rate		20104	20252	18108														
10	Heating Value		1210	1653	1161														
11	Ash		80.91	81.34	81.21														
12	Chlorine		16614	17677	20709														
13																			
14	Stack Gas Flov		67308	62250	64258														
15	Oxygen		16.2	15.3	15														
16																			
17	<i>Feedrate MTE:</i>																		
18	Ash		188462	173782	142774	201129	185204	152620	220300	201597	174178	198692							
19	Chlorine		3869766	3776722	3640818	21306887	22048461	14747742	21911683	22637123	15585615	20044807							
20																			
21	210C2		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3					Cond Avg
22																			
23	Feedstream Nt		F5	F5	F5							F6	F6	F6					F6
24	Feed Class		Solid HW	Solid HW	Solid HW							Total	Total	Total	Total	Total	Total	Total	Total
25	Feed Class 2					HW	HW	HW				Total	Total	Total	Total	Total	Total	Total	Total
26	Feedstream Dr		Bulk Solids	Bulk Solids	Bulk Solids							Total	Total	Total	Total	Total	Total	Total	Total
27	Feed Rate																		
28	Heating Value																		
29	Ash		14782	17057	16147														
30	Chlorine		220	317	233														
31																			
32	Stack Gas Flov		47498	49225	47370														
33	Oxygen		13.7	13.6	13.3														
34																			
35	<i>Feedrate MTE:</i>																		
36	Ash		159581	175280	165708	162560	183197	174066	182931	199475	193287	191898							
37	Chlorine		2375039	3257527	2391157	16938345	18065402	16050510	17953134	19028273	17013130	17998179							