

US EPA ARCHIVE DOCUMENT

	B	C
1	Source Description	
2		
3	Phase I ID No.	3021
4	EPA ID No.	PRD090028101
5	Facility Name	Merck Sharp and Dohme
6	Facility Location	
7	City	Barceloneta
8	State	PR
9	Unit ID Name/No.	Rotary kiln incinerator
10	Other Sister Facilities	
11	Number of Sister Facilities	0
12	Combustor Class	Onsite incinerator
13	Combustor Type	Rotary kiln
14	Combustor Characteristics	
15	Capacity (MMBtu/hr)	
16	Soot Blowing	
17	APCS Detailed Acronym	WS
18	APCS General Class	HEWS
19	APCS Characteristics	Collision type scrubber
20	Hazardous Wastes	Liq, solid, sludge
21	Haz Waste Description	Aqueous liquids, solvents, sludges, solids
22	Supplemental Fuel	
23		
24	Stack Characteristics	
25	Diameter (ft)	
26	Height (ft)	
27	Gas Velocity (ft/sec)	
28	Gas Temperature (°F)	
29		
30	Permitting Status	Tier III for Sb, As, Be, Cd, Cr, Pb
31	HWC Burn Status (Date if Terminated)	

	B	C
1	Condition Description	
2		
3	3021C1	
4		
5	Report Name/Date	Stationary Source Sampling Report, Reference No. 12521, Merck Sharp and Dohme Quimica, Barceloneta, Puerto Rico, April 1996
6	Report Prepare	Entropy Inc.
7	Testing Firm	Entropy Inc.
8	Testing Dates	April 29-30, 1996
9	Cond Dates	Apr-96
10	Condition Descr	Trial burn, min temp, solid and liquid waste
11	Content	PM, HCl/Cl2, DRE, PCDD/F, VOC, SVOC
12		
13	3021C2	
14		
15	Report Name/Date	Stationary Source Sampling Report, Reference No. 12521, Merck Sharp and Dohme Quimica, Barceloneta, Puerto Rico, April 1996
16	Report Prepare	Entropy Inc.
17	Testing Firm	Entropy Inc.
18	Testing Dates	April 23-24, 1996
19	Cond Dates	Apr-96
20	Condition Descr	Trial burn, min temp, liquid waste only
21	Content	PM, HCl/Cl2, DRE, PCDD/F, VOC, SVOC
22		
23	3021C3	
24		
25	Report Name/Date	Stationary Source Sampling Report, Reference No. 12521, Merck Sharp and Dohme Quimica, Barceloneta, Puerto Rico, April 1996
26	Report Prepare	Entropy Inc.
27	Testing Firm	Entropy Inc.
28	Testing Dates	April 26, 1996
29	Cond Dates	Apr-96
30	Condition Descr	Trial burn, max temp, solid and liquid waste
31	Content	PM, HCl/Cl2, metals
32		
33	3021C4	
34		
35	Report Name/Date	Stationary Source Sampling Report, Reference No. 12521, Merck Sharp and Dohme Quimica, Barceloneta, Puerto Rico, April 1996
36	Report Prepare	Entropy Inc.
37	Testing Firm	Entropy Inc.
38	Testing Dates	April 27, 1996
39	Cond Dates	Apr-96
40	Condition Descr	Trial burn, max temp, liquid waste only
41	Content	PM, HCl/Cl2, metals

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Stack Gas Emissions												
2													
3			Comments	Units	7% O2								
4													
5													
6	1	3021C1					R1		R2		R3		Cond Avg
7													
8		PM	E1	gr/dscf	y		0.0108		0.0132		0.0118		0.0119
9													
10		HCl	E1	ppmv	y		2.45		2.91		2.13		2.5
11		Cl2	E1	ppmv	y		20		9.47		8.28		12.6
12		Total Chlorine	E1	ppmv	y		42.45		21.85		18.69		27.7
13													
14		Sampling Train	PM, HCl/Cl2	E1									
15		Stack Gas Flowrate		dscfm			6232		6107		6036		6125.0
16		O2		%			7.5		6.9		5.8		6.7
17		Moisture		%			23.2		24.3		23.8		23.8
18		Temperature		°F			246		260		261		255.7
19													
20		Sampling Train	PCDD/PCDF	E2									
21		Stack Gas Flowrate		dscfm			6385		6230		6087		6234.0
22		O2		%			7.5		6.9		5.8		6.7
23		Moisture		%			22.3		23.2		23.3		22.9
24		Temperature		°F			247		259		261		255.7
25													
26		POHC DRE	Chlorobenzene										
27		POHC Feedrate		lb/hr			20.65		20.72		20.61		
28		Emission Rate	E2	lb/hr		nd	2.42E-05	nd	6.35E-05	nd	2.06E-05		
29		DRE	E2	%		>	99.999883	>	99.999694	>	99.99990005		
30													
31		POHC DRE	Chloroform										
32		POHC Feedrate		lb/hr			17.36		17.42		17.33		
33		Emission Rate	E2	lb/hr			0.00368		0.00311		0.00272		
34		DRE	E2	%			99.978802		99.982147		99.98430467		
35													
36		POHC DRE	Naphthalene										
37		POHC Feedrate		lb/hr			54.95		55.13		54.85		
38		Emission Rate	E2	lb/hr			8.32E-05		1.01E-03		7.36E-05		
39		DRE	E2	%			99.999849		99.99987		99.99986582		
40													
41	2	3021C2					R1		R2		R3		Cond Avg
42													
43		PM	E1	gr/dscf	y		0.0433		0.0346		0.0239		0.0339
44													
45		HCl	E1	ppmv	y		2.7		3.86		3.27		3.3
46		Cl2	E1	ppmv	y		17.7		28.8		18.6		21.7
47		Total Chlorine	E1	ppmv	y		38.1		61.46		40.47		46.7
48													
49		Sampling Train	PM, HCl/Cl2	E1									
50		Stack Gas Flowrate		dscfm			5684		6028		6254		5988.7
51		O2		%			10		9.4		8.4		9.3
52		Moisture		%			18.3		19.2		18.5		18.7
53		Temperature		°F			256		251		260		255.7
54													
55		Sampling Train	PCDD/PCDF	E2									
56		Stack Gas Flowrate		dscfm			5921		6000		6185		6035.3
57		O2		%			10		9.4		8.4		9.3
58		Moisture		%			18.8		19.3		20.6		19.6
59		Temperature		°F			253		256		254		254.3
60													
61		POHC DRE	Chlorobenzene										
62		POHC Feedrate		lb/hr			17		18.54		18.54		
63		Emission Rate	E2	lb/hr		nd	3.34E-04	nd	3.93E-05	nd	3.97E-05		
64		DRE	E2	%		>	99.998035	>	99.99979	>	99.99978587		
65													
66		POHC DRE	Chloroform										
67		POHC Feedrate		lb/hr			14.36		15.66		15.66		
68		Emission Rate	E2	lb/hr		nd	0.00426		0.00413		0.00457		
69		DRE	E2	%		>	99.970334		99.973627		99.97081737		
70													
71		POHC DRE	Naphthalene										

	A	B	C	D	E	F	G	H	I	J	K	L	M
72		POHC Feedrate		lb/hr			48.68		53.1		53.1		
73		Emission Rate	E2	lb/hr			1.25E-04		8.87E-05		1.03E-04		
74		DRE	E2	%			99.999743		99.999833		99.99980603		
75													
76		3 3021C3					R1		R2		R3		Cond Avg
77													
78		PM	E1	gr/dscf	y		0.0279		0.0333		0.0365		0.0326
79													
80		HCl	E1	ppmv	y		3.61		4.26		6.54		4.8
81		Cl2	E1	ppmv	y		5.35		2.86		5.34		4.5
82		Total Chlorine	E1	ppmv	y		14.31		9.98		17.22		13.8
83													
84		Antimony		gr/dscf	y		7.37E-05		7.91E-05		7.42E-05		
85		Arsenic		gr/dscf	y		2.20E-04		2.66E-04		2.65E-04		
86		Beryllium		gr/dscf	y		6.71E-07		8.83E-07		1.08E-06		
87		Cadmium		gr/dscf	y		5.66E-05		6.47E-05		6.45E-05		
88		Chromium		gr/dscf	y		4.02E-07		5.39E-07		2.28E-07		
89		Lead		gr/dscf	y		0.00106		0.0011		0.00124		
90		Thallium		gr/dscf	y		1.38E-07		1.36E-07		1.27E-07		
91													
92		Sampling Train	PM, HCl/Cl2	E1									
93		Stack Gas Flowrate		dscfm			6289		6228		6279		6265.3
94		O2		%			6.4		8		7.5		7.3
95		Moisture		%			20		21.3		21.7		21.0
96		Temperature		°F			247		246		246		246.3
97													
98		Sampling Train	Metals	E2									
99		Stack Gas Flowrate		dscfm			6280		6449		6356		6361.7
100		O2		%			6.4		8		7.5		7.3
101		Moisture		%			19.5		20.4		21.1		20.3
102		Temperature		°F			245		245		245		245.0
103													
104		Antimony	E2	ug/dscm	y		168.9		181.3		170.0		173.4
105		Arsenic	E2	ug/dscm	y		504.2		609.6		607.3		573.7
106		Beryllium	E2	ug/dscm	y		1.5		2.0		2.5		2.0
107		Cadmium	E2	ug/dscm	y		129.7		148.3		147.8		141.9
108		Chromium	E2	ug/dscm	y		0.9		1.2		0.5		0.9
109		Lead	E2	ug/dscm	y		2429.3		2520.9		2841.8		2597.3
110		Thallium	E2	ug/dscm	y		0.3		0.3		0.3		0.3
111													
112		SVM	E2	ug/dscm	y		2559.0		2669.2		2989.6		2739.3
113		LVM	E2	ug/dscm	y		506.6		612.9		610.3		576.6
114													
115		4 3021C4					R1		R2		R3		Cond Avg
116													
117		PM	E1	gr/dscf	y		0.0378		0.0423		0.0391		0.0397
118													
119		HCl	E1	ppmv	y		4.73		4.23		3.45		4.1
120		Cl2	E1	ppmv	y		47.1		48.6		37		44.2
121		Total Chlorine	E1	ppmv	y		98.93		101.43		77.45		92.6
122													
123		Antimony		gr/dscf	y		6.86E-04		7.48E-04		7.07E-04		
124		Arsenic		gr/dscf	y		9.78E-05		1.09E-04		9.92E-05		
125		Beryllium		gr/dscf	y		2.22E-06		2.51E-06		2.14E-06		
126		Cadmium		gr/dscf	y		5.51E-05		5.27E-05		5.12E-05		
127		Chromium		gr/dscf	y		2.82E-06		2.39E-06		2.06E-06		
128		Lead		gr/dscf	y		9.93E-04		1.16E-03		1.04E-03		
129		Thallium		gr/dscf	y	nd	1.72E-07	nd	1.96E-07	nd	1.60E-07		
130													
131		Sampling Train	PM, HCl/Cl2	E1									
132		Stack Gas Flowrate		dscfm			5692		5663		5680		5678.3
133		O2		%			7.8		8.7		6.8		7.8
134		Moisture		%			23		22.7		22.3		22.7
135		Temperature		°F			260		260		260		260.0
136													
137		Sampling Train	Metals	E2									
138		Stack Gas Flowrate		dscfm			5702		5564		5831		5699.0
139		O2		%			7.8		8.7		6.8		7.8
140		Moisture		%			22.8		22.6		22.3		22.6
141		Temperature		°F			259		259		260		259.3
142													

	A	B	C	D	E	F	G	H	I	J	K	L	M
143		Antimony	E2	ug/dscm	y		1572.2		1714.2		1620.3		1635.6
144		Arsenic	E2	ug/dscm	y		224.1		249.8		227.3		233.8
145		Beryllium	E2	ug/dscm	y		5.1		5.8		4.9		5.2
146		Cadmium	E2	ug/dscm	y		126.3		120.8		117.3		121.5
147		Chromium	E2	ug/dscm	y		6.5		5.5		4.7		5.6
148		Lead	E2	ug/dscm	y		2275.7		2658.5		2383.4		2439.2
149		Thallium	E2	ug/dscm	y		0.4		0.4		0.4		0.4
150													
151		SVM	E2	ug/dscm	y		2402.0		2779.2		2500.8		2560.7
152		LVM	E2	ug/dscm	y		235.7		261.0		237.0		244.6

	B	C	D	E	F	G	H	I	J	K	L
1	Feedstream 1										
2											
3	3021C1				R1		R2		R3		Cond Avg
4											
5	Feedstream Number				F1		F1		F1		F1
6	Feed Class				Total		Total		Total		Total
7	Feed Class 2				Total		Total		Total		Total
8	Feedstream Description				Total		Total		Total		Total
9	Ash				3187		3369		3239		3265
10	Chlorine		lb/hr		416		450		457		441
11											
12	Stack Gas Flowrate		dscfm		6232.0		6107.0		6036.0		6125.0
13	Oxygen		%		7.5		6.9		5.8		6.7
14											
15	<i>Feedrate MTEC Calculations</i>										
16	Ash		mg/dscm		141797		146454		132149		139862
17	Chlorine		ug/dscm		18508802		19561929		18645309		18891054
18											
19	3021C2				R1		R2		R3		Cond Avg
20											
21	Feedstream Number				F1		F1		F1		F1
22	Feed Class				Total		Total		Total		Total
23	Feed Class 2				Total		Total		Total		Total
24	Feedstream Description				Total		Total		Total		Total
25	Ash		lb/hr		32		32		32		32
26	Chlorine		lb/hr		482		503		510		498
27											
28	Stack Gas Flowrate		dscfm		5684.0		6028.0		6254.0		5988.7
29	Oxygen		%		10		9.4		8.4		9.3
30											
31	<i>Feedrate MTEC Calculations</i>										
32	Ash		mg/dscm		1916		1713		1520		1705
33	Chlorine		ug/dscm		28856688		26926689		24226348		26529190
34											
35	3021C3	Trial burn			R1		R2		R3		Cond Avg
36											
37	Feedstream Number				F1		F1		F1		F1
38	Feed Class				Total		Total		Total		Total
39	Feed Class 2				Total		Total		Total		Total
40	Feedstream Description				Total		Total		Total		Total
41	Ash		lb/hr		8270		9207		9000.0		8826.0
42	Chlorine		lb/hr		320		378		349		349.0
43	Cadmium		g/hr		18.3		20.2		19.30		19.20
44	Antimony		g/hr		435		481		458		454
45	Chromium		g/hr		20.8		23		21.9		21.7
46	Arsenic		g/hr		60.4		66.8		63.6		63.2
47	Lead		g/hr		432		478		455		453
48	Beryllium		g/hr		51.7		57.2		54.4		54.1
49											
50											
51	Stack Gas Flowrate		dscfm		6280.0		6449.0		6356.0		6361.7
52	Oxygen		%		6.4		8.0		7.5		7.3
53											
54	<i>Feedrate MTEC Calculations</i>										
55											
56	Ash		mg/dscm		337629		411082		392619		379069
57	Chlorine		ug/dscm		13064226		16877273		15224883		14989259
58	Cadmium		ug/dscm		1646		1987		1855		1816
59	Antimony		ug/dscm		39117		47304		44009		42949
60	Chromium		ug/dscm		1870		2262		2104		2053
61	Arsenic		ug/dscm		5431		6569		6111		5979
62	Lead		ug/dscm		38847		47009		43720		42855
63	Beryllium		ug/dscm		4649		5625		5227		5118
64											
65	LVM		ug/dscm		11951		14457		13443		13150
66	SVM		ug/dscm		40493		48996		45575		44671
67											
68											
69	3021C4	Trial burn			R1		R2		R3		Cond Avg
70											
71	Feedstream Number				F1		F1		F1		F1
72	Feed Class				Total		Total		Total		Total
73	Feed Class 2				Total		Total		Total		Total
74	Feedstream Description				Total		Total		Total		Total
75	Ash		lb/hr		15		15		15.0		15.0
76	Chlorine		lb/hr		613		620		625		619.0
77	Cadmium		g/hr		21.1		21.12		21.10		21.10
78	Antimony		g/hr		464		463		463		463
79	Chromium		g/hr		0.91		0.91		0.91		0.91
80	Arsenic		g/hr		63.3		63.2		63.3		63.2
81	Lead		g/hr		501		499		500		500

	B	C	D	E	F	G	H	I	J	K	L
82	Beryllium		g/hr		2.72		2.72		2.72		2.72
83											
84											
85	Stack Gas Flowrate		dscfm		5702.0		5564.0		5831.0		5699.0
86	Oxygen		%		7.8		8.7		6.8		7.8
87											
88	<i>Feedrate MTEC Calculations</i>										
89											
90	Ash		mg/dscm		746		820		678		745
91	Chlorine		ug/dscm		25026158		27682299		27265192		26585533
92	Cadmium		ug/dscm		2311		2544		2101		2307
93	Antimony		ug/dscm		50828		55780		46104		50618
94	Chromium		ug/dscm		100		110		91		99
95	Arsenic		ug/dscm		6934		7614		6303		6909
96	Lead		ug/dscm		54882		60117		49788		54663
97	Beryllium		ug/dscm		298		328		271		297
98											
99	LVM		ug/dscm		7332		8051		6665		7306
100	SVM		ug/dscm		57193		62662		51890		56970

	B	C
1	Process Information	
2		
3	3021C1	

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	PCDD/PCDF																
2	N																
3	Facility Name and ID:	Merck Sharp and Dohme															
4	Condition ID:	3021C1															
5	Condition/Test Date:	Trial burn, April 1996															
6																	
7		I-TEF															
8		Wght Fact															
9																	
10	Detected in sample volume (ng)																
11	2,3,7,8-TCDD	1	nd	0.0189	0.0189	0.0095	0.0095	nd	0.0137	0.0137	0.0069	0.0069	nd	0.0133	0.0133	0.0067	0.0067
12	Other TCDD	0		0.2730	0.0000	0.2730	0.0000		0.3588	0.0000	0.3588	0.0000		0.1830	0.0000	0.1830	0.0000
13	1,2,3,7,8-PCDD	0.5	nd	0.0287	0.0144	0.0144	0.0072	nd	0.0118	0.0059	0.0059	0.0030	nd	0.0145	0.0073	0.0073	0.0036
14	Other PCDD	0		0.0561	0.0000	0.0561	0.0000		0.0515	0.0000	0.0515	0.0000		0.0383	0.0000	0.0383	0.0000
15	1,2,3,4,7,8-HxCDD	0.1	nd	0.0237	0.0024	0.0119	0.0012	nd	0.0230	0.0023	0.0115	0.0012	nd	0.0287	0.0029	0.0144	0.0014
16	1,2,3,6,7,8-HxCDD	0.1		0.017	0.0017	0.0170	0.0017	nd	0.0210	0.0021	0.0105	0.0011	nd	0.0262	0.0026	0.0131	0.0013
17	1,2,3,7,8,9-HxCDD	0.1		0.0122	0.0012	0.0122	0.0012	nd	0.0203	0.0020	0.0102	0.0010	nd	0.0253	0.0025	0.0127	0.0013
18	Other HxCDD	0		0.0920	0.0000	0.0920	0.0000		0.1240	0.0000	0.1240	0.0000		0.1418	0.0000	0.1418	0.0000
19	1,2,3,4,6,7,8-HpCDD	0.01		0.0632	0.0006	0.0632	0.0006		0.0843	0.0008	0.0843	0.0008		0.1742	0.0017	0.1742	0.0017
20	Other HpCDD	0		0.0381	0.0000	0.0381	0.0000		0.0433	0.0000	0.0433	0.0000		0.1150	0.0000	0.1150	0.0000
21	OCDD	0.001		0.1600	0.0002	0.1600	0.0002		0.2050	0.0002	0.2050	0.0002		0.5067	0.0005	0.5067	0.0005
22	2,3,7,8-TCDF	0.1		5.8873	0.5887	5.8873	0.5887		4.5219	0.4522	4.5219	0.4522		3.7486	0.3749	3.7486	0.3749
23	Other TCDF	0		13.7556	0.0000	13.7556	0.0000		9.6681	0.0000	9.6681	0.0000		7.8032	0.0000	7.8032	0.0000
24	1,2,3,7,8-PCDF	0.05		0.8523	0.0426	0.8523	0.0426		1.2076	0.0604	1.2076	0.0604		1.0593	0.0530	1.0593	0.0530
25	2,3,4,7,8-PCDF	0.5		0.4220	0.2110	0.4220	0.2110		0.4486	0.2243	0.4486	0.2243		0.4125	0.2063	0.4125	0.2063
26	Other PCDF	0		2.0955	0.0000	2.0955	0.0000		2.0122	0.0000	2.0122	0.0000		1.9625	0.0000	1.9625	0.0000
27	1,2,3,4,7,8-HxCDF	0.1		0.7395	0.0740	0.7395	0.0740		1.4420	0.1442	1.4420	0.1442		1.4850	0.1485	1.4850	0.1485
28	1,2,3,6,7,8-HxCDF	0.1		0.2258	0.0226	0.2258	0.0226		0.3418	0.0342	0.3418	0.0342		0.3552	0.0355	0.3552	0.0355
29	2,3,4,6,7,8-HxCDF	0.1		0.1065	0.0107	0.1065	0.0107		0.1043	0.0104	0.1043	0.0104		0.1023	0.1023	0.1023	0.1023
30	1,2,3,7,8,9-HxCDF	0.1	nd	0.0289	0.0029	0.0145	0.0014		0.0386	0.0039	0.0386	0.0039		0.0413	0.0041	0.0413	0.0041
31	Other HxCDF	0		0.8322	0.0000	0.8322	0.0000		0.9185	0.0000	0.9185	0.0000		0.8882	0.0000	0.8882	0.0000
32	1,2,3,4,6,7,8-HpCDF	0.01		0.3008	0.0030	0.3008	0.0030		0.2472	0.0025	0.2472	0.0025		0.4102	0.0041	0.4102	0.0041
33	1,2,3,4,7,8,9-HpCDF	0.01		0.1176	0.0012	0.1176	0.0012		0.0987	0.0010	0.0987	0.0010		0.1162	0.0012	0.1162	0.0012
34	Other HpCDF	0		0.1944	0.0000	0.1944	0.0000		0.1381	0.0000	0.1381	0.0000		0.1952	0.0000	0.1952	0.0000
35	OCDF	0.001		0.2797	0.0003	0.2797	0.0003		0.1593	0.0002	0.1593	0.0002		0.6737	0.0007	0.6737	0.0007
36																	
37	Gas sample volume (dscl)			138.462	138.462	138.462	138.462		134.869	134.869	134.869	134.869		133.258	133.258	133.258	133.258
38	O2 (%)			7.5	7.5	7.5	7.5		6.9	6.9	6.9	6.9		5.8	5.8	5.8	5.8
39																	
40	PCDD/PCDF (ng in sample)			1.00	1.00	26.6	0.98		0.96	0.96	22.3	0.95		0.87	0.87	20.5	0.85
41	PCDD/PCDF (ng/dscm @ 7% O2)		3.9	0.2637	0.2637	7.03	0.2586	2.7	0.250	0.250	5.79	0.246	3.3	0.2123	0.2123	5.00	0.2088
42																	
43	TEQ Cond Avg			0.2379	0.2379												
44	Total Cond Avg			5.9404	5.9404												

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	PCDD/PCDF																
2	N																
3	Facility Name and ID:	Merck Sharp and Dohme															
4	Condition ID:	3021C2															
5	Condition/Test Date:	Trial burn, April 1996															
6																	
7		I-TEF															
8		Wght Fact															
9																	
10		Detected in sample volume (ng)															
11	2,3,7,8-TCDD	1	nd	0.0155	0.0155	0.0078	0.0078	nd	0.0142	0.0142	0.0071	0.0071	nd	0.0205	0.0205	0.0103	0.0103
12	Other TCDD	0		0.372	0.0000	0.3720	0.0000		0.4807	0.0000	0.4807	0.0000		0.4595	0.0000	0.4595	0.0000
13	1,2,3,7,8-PCDD	0.5	nd	0.0264	0.0132	0.0132	0.0066	nd	0.0236	0.0118	0.0118	0.0059	nd	0.0374	0.0187	0.0187	0.0094
14	Other PCDD	0		0.2461	0.0000	0.2461	0.0000		0.1944	0.0000	0.1944	0.0000		0.1969	0.0000	0.1969	0.0000
15	1,2,3,4,7,8-HxCDD	0.1		0.0255	0.0026	0.0255	0.0026		0.0254	0.0025	0.0254	0.0025		0.0152	0.0015	0.0152	0.0015
16	1,2,3,6,7,8-HxCDD	0.1		0.0425	0.0043	0.0425	0.0043		0.0338	0.0034	0.0338	0.0034		0.054	0.0054	0.054	0.0054
17	1,2,3,7,8,9-HxCDD	0.1		0.0663	0.0066	0.0663	0.0066		0.0264	0.0026	0.0264	0.0026		0.0506	0.0051	0.0506	0.0051
18	Other HxCDD	0		0.3578	0.0000	0.3578	0.0000		0.2562	0.0000	0.2562	0.0000		0.4553	0.0000	0.4553	0.0000
19	1,2,3,4,6,7,8-HpCDD	0.01		0.4142	0.0041	0.4142	0.0041		0.1355	0.0014	0.1355	0.0014		0.336	0.0034	0.336	0.0034
20	Other HpCDD	0		0.364	0.0000	0.3640	0.0000		0.115	0.0000	0.1150	0.0000		0.2823	0.0000	0.2823	0.0000
21	OCDD	0.001		1.069	0.0011	1.0690	0.0011		0.2594	0.0003	0.2594	0.0003		0.5787	0.0006	0.5787	0.0006
22	2,3,7,8-TCDF	0.1		3.8248	0.3825	3.8248	0.3825		3.1261	0.3126	3.1261	0.3126		3.1389	0.3139	3.1389	0.3139
23	Other TCDF	0		10.7449	0.0000	10.7449	0.0000		7.3742	0.0000	7.3742	0.0000		8.5684	0.0000	8.5684	0.0000
24	1,2,3,7,8-PCDF	0.05		1.0048	0.0502	1.0048	0.0502		1.0847	0.0542	1.0847	0.0542		1.2286	0.0614	1.2286	0.0614
25	2,3,4,7,8-PCDF	0.5		0.4868	0.2434	0.4868	0.2434		0.4671	0.2336	0.4671	0.2336		0.56	0.2800	0.5600	0.2800
26	Other PCDF	0		2.6898	0.0000	2.6898	0.0000		2.6237	0.0000	2.6237	0.0000		3.406	0.0000	3.4060	0.0000
27	1,2,3,4,7,8-HxCDF	0.1		0.614	0.0614	0.6140	0.0614		0.7024	0.0702	0.7024	0.0702		1.0089	0.1009	1.0089	0.1009
28	1,2,3,6,7,8-HxCDF	0.1		0.1945	0.0195	0.1945	0.0195		0.2477	0.0248	0.2477	0.0248		0.357	0.0357	0.3570	0.0357
29	2,3,4,6,7,8-HxCDF	0.1		0.1244	0.0124	0.1244	0.0124		0.0439	0.0044	0.0439	0.0044	nd	0.1251	0.0125	0.0626	0.0063
30	1,2,3,7,8,9-HxCDF	0.1		0.0139	0.0014	0.0139	0.0014	nd	0.0169	0.0017	0.0085	0.0008		0.0108	0.0011	0.0108	0.0011
31	Other HxCDF	0		0.7209	0.0000	0.7209	0.0000		0.7296	0.0000	0.7296	0.0000		1.2328	0.0000	1.2328	0.0000
32	1,2,3,4,6,7,8-HpCDF	0.01		0.4135	0.0041	0.4135	0.0041		0.3389	0.0034	0.3389	0.0034		0.649	0.0065	0.6490	0.0065
33	1,2,3,4,7,8,9-HpCDF	0.01		0.0718	0.0007	0.0718	0.0007	nd	0.0695	0.0007	0.0348	0.0003	nd	0.1107	0.0011	0.0554	0.0006
34	Other HpCDF	0		0.0911	0.0000	0.0911	0.0000		0.1611	0.0000	0.1611	0.0000		0.3161	0.0000	0.3161	0.0000
35	OCDF	0.001		0.3058	0.0003	0.3058	0.0003		0.2111	0.0002	0.2111	0.0002		0.4275	0.0004	0.4275	0.0004
36																	
37	Gas sample volume (dsct)			133.534	133.534	133.534	133.534		130.767	130.767	130.767	130.767		134.542	134.542	134.542	134.542
38	O2 (%)			10	10	10	10		9.4	9.4	9.4	9.4		8.4	8.4	8.4	8.4
39																	
40	PCDD/PCDF (ng in sample)			0.82	0.82	24.3	0.81		0.74	0.74	18.7	0.73		0.87	0.87	23.5	0.84
41	PCDD/PCDF (ng/dscm @ 7% O2)		3.5	0.2773	0.2773	8.18	0.2724	3.8	0.242	0.242	6.10	0.237	6.1	0.2535	0.2535	6.85	0.2458
42																	
43	TEQ Cond Avg			0.2519	0.2519												
44	Total Cond Avg			7.0424	7.0424												