	B	C
1	**Source Description**	
2		
3	Phase I ID No.	609
4	EPA ID No.	TXD055141378
5	Facility Name	Safety-Kleen Inc.
6	Facility Location	
7	City	Deer Park
8	State	TX
9	Unit ID Name/No.	Safety-Kleen incineration system
10	Other Sister Facilities	None
11	Number of Sister Facilities	0
12	Combustor Class	Commercial incinerator
13	Combustor Type	Rotary kiln
14	Combustor Characteristics	Composed of two trains that exhaust to a common stack. Train I is a 3.6-meter diameter rotary kiln and an afterburner which has a gas residence time of 2 seconds or more. Train II has a 4.4-meter diamter rotary kiln and a rotary reactor that feed gases in to an after burner.
15	Capacity (MMBtu/hr)	
16	Soot Blowing	None
17	APCS Detailed Acronym	S/PT/VS
18	APCS General Class	WQ,LEWS,HEWS
19	APCS Characteristics	Saturator which provides a rapid quench to less than 200F gas temperature, dual packed tower condensors,and a high energy-impact Calvert venturi scrubber.
20	Hazardous Wastes	Liq,solid
21	Haz Waste Description	Liq wastes (RCRA BLD T27/28, RCRA BLD V110, direct burn, TOx stream and PCB BLD T131). Solid wastes (RCRA repack, rotary reactor bulk solids and reburn ash)
22	Supplemental Fuel	Natural gas
23		
24	Stack Characteristics	
25	Diameter (ft)	6.00
26	Height (ft)	216.0
27	Gas Velocity (ft/sec)	46.3
28	Gas Temperature (°F)	130
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	**609C10**	
4		
5	Report Name/Date	Trial Burn/ Risk Burn Report Conditions 1,2 and 4, August 1998
6	Report Prepare	TRC Environmental Corporation
7	Testing Firm	TRC Environmental Corporation
8	Testing Dates	April 2-3, 1998
9	Cond Dates	Apr-98
10	Condition Descr	Risk burn organics, max RR feed, low temp-Condition 1
11	Content	CO, PCDD/F, particle sizes, SO2, NOx
12		
13	**609C11**	
14		
15	Report Name/Date	Trial Burn/ Risk Burn Report Conditions 1,2 and 4, August 1998
16	Report Prepare	TRC Environmental Corporation
17	Testing Firm	TRC Environmental Corporation
18	Testing Dates	April 1, 1998
19	Cond Dates	Apr-98
20	Condition Descr	Risk burn metals, high temp, max RR feed, moderate metals spike - Condition 2
21	Content	PM, HCl/ Cl2, metals
22		
23	**609C13**	
24		
25	Report Name/Date	Trial Burn/ Risk Burn Report Conditions 1,2 and 4, August 1998
26	Report Prepare	TRC Environmental Corporation
27	Testing Firm	TRC Environmental Corporation
28	Testing Dates	March 31, 1998
29	Cond Dates	Apr-98
30	Condition Descr	Trial burn, max temp, max metals spike - Condition 4
31	Content	PM, HCl/ Cl2, metals
32		
33	**609C12A**	
34		
35	Report Name/Date	Trial Burn/ Risk Burn Report Conditions 3I and 3II, October 1998
36	Report Prepare	TRC Environmental Corporation
37	Testing Firm	TRC Environmental Corporation
38	Testing Dates	June 16-17, 1998
39	Cond Dates	Oct-98
40	Condition Descr	Trial burn, min temp, max feedrate, DRE train I - Condition
41	Content	PM, HCl/Cl2, DRE
42		
43	**609C12B**	
44		
45	Report Name/Date	Trial Burn/ Risk Burn Report Conditions 3I and 3II, October 1998
46	Report Prepare	TRC Environmental Corporation
47	Testing Firm	TRC Environmental Corporation
48	Testing Dates	August 11-12, 1998
49	Cond Dates	Oct-98
50	Condition Descr	Trial burn, min temp, max feedrate, DRE train II - Condition
51	Content	PM, HCl/Cl2, DRE
52		
53	**609C1**	
54		
55	Report Name/Date	REX(TX) Stack Test Results, Incinerator Trains I/II Tri-Annual RCRA Requirements and TSCA (PCB) Testing, prepared for Rollins Environmental Services, Deer Park TX, prepared by TRC Environmental, April 1995
56	Report Prepare	TRC Environmental
57	Testing Firm	TRC Environmental
58	Cond Descr	TRAIN I: IS A RCRA AND TSCA PERMITTED INCINERATOR
59	Testing Dates	March 7-17, 1995
60	Cond Dates	Apr-95

	B	C	D	E	F	G	H	I	J	K	L	M
1	**Stack Gas Emissions 1**											
2												
3		Comments	Units	7% O2								
4												
5	**609C10**	**Risk Burn**				R1		R2		R3		Cond Avg
6												
7	CO (RA)	E1	ppmv	y	nd	0.11	nd	0.11	nd	0.11		0.11
8	HC (RA)		ppmv	n		0.4		0.29		0.78		
9	SO2		ppmv	n		1.7	nd	0.1	nd	0.1		
10	NOx		ppmv	n		97.6		99.3		39		
11												
12	Sampling Train	PM, HCl/Cl2	E1									
13	Stack Gas Flowrate		dscfm			70527		70003		70613		70381.0
14	O2		%			8.5		8.2		8.4		8.4
15	Moisture		%			3.5		3.6		3.2		3.4
16	Temperature		°F			112.9		114.9		114		113.9
17												
18	Sampling Train	PCDD/F	E2									
19	Stack Gas Flowrate		dscfm			68082		67166		70191		68479.7
20	O2		%			8.5		8.2		8.4		8.4
21	Moisture		%			4.6		5.3		3.8		4.6
22	Temperature		°F			110.6		138.7		111.1		120.1
23												
24	HC (RA)	E1	ppmv	y		0.4		0.3		0.9		0.5
25	SO2	E1	ppmv	y		1.9	nd	0.1	nd	0.1		0.7
26	NOx	E1	ppmv	y		109.3		108.6		43.3		87.1
27												
28	**609C11**	**Risk Burn**				R1		R2		R3		Cond Avg
29												
30	PM	E1	gr/dscf	y		0.0118		0.0116		0.011		0.0115
31												
32	HCl		lb/hr			0.12		0.22		0.17		
33	Cl2		lb/hr		nd	0.14	nd	0.13	nd	0.18		
34												
35	Antimony		g/hr			9		6		6		
36	Arsenic		g/hr			7		5.9		6.2		
37	Beryllium		g/hr			0.058	nd	0.04	nd	0.04		
38	Cadmium		g/hr			7.1		6.1		6.1		
39	Chromium		g/hr			0.92		1.09		0.8		
40	Chromium (Hex)		g/hr			0.18		0.21		0.17		
41	Lead		g/hr			136		136		122		
42	Barium		g/hr			7.7		4.1		4.2		
43	Mercury		g/hr			5.3		3.4		3.2		
44	Nickel		g/hr			6.3		3.8		3.6		
45	Selenium		g/hr		nd	4.1	nd	3.9	nd	4		
46	Silver		g/hr			0.35		0.23		0.21		
47	Thallium		g/hr		nd	41	nd	39	nd	40		
48	Zinc		g/hr			66		50		53		
49												
50	Sampling Train	PM, metals	E1									
51	Stack Gas Flowrate		dscfm			70963		71422		72252		71545.7
52	O2		%			7.4		6.6		6.6		6.9
53	Moisture		%			3.1		3.3		3.2		3.2
54	Temperature		°F			114.6		116.1		115.5		115.4
55												
56	Sampling Train	HCl/Cl2	E2									
57	Stack Gas Flowrate		dscfm			74320		73004		70808		72710.7
58	O2		%			7.4		6.6		6.6		6.9
59	Moisture		%			3.1		3.2		3.3		3.2
60	Temperature		°F			112.8		114.7		113.6		113.7
61												
62	Sampling Train	Cr+6	E3									
63	Stack Gas Flowrate		dscfm			70164		70128		71109		70467
64	O2		%			7.4		6.6		6.6		7
65	Moisture		%			3		3.3		4		3
66	Temperature		°F			114		115.5		114.6		115
67												
68	HCl	E2	ppmv	y		0.3		0.5		0.4		0.41
69	Cl2	E2	ppmv	y	nd	0.2	nd	0.2	nd	0.2		0.19
70	Total Chlorine	E2	ppmv	y	55	0.65	##	0.84	##	0.87	##	0.79
71												

	B	C	D	E	F	G	H	I	J	K	L	M
72	Antimony	E1	ug/dscm	y		76.9		48.1		47.5		57.5
73	Arsenic	E1	ug/dscm	y		59.8		47.3		49.1		52.1
74	Beryllium	E1	ug/dscm	y		0.5		0.3		0.3		0.4
75	Cadmium	E1	ug/dscm	y		60.7		48.9		48.3		52.6
76	Chromium	E1	ug/dscm	y		7.9		8.7		6.3		7.6
77	Chromium (Hex)	E1	ug/dscm	y		1.6		1.7		1.4		1.5
78	Lead	E1	ug/dscm	y		1161.9		1090.3		966.8		1073.0
79	Barium	E1	ug/dscm	y		65.8		32.9		33.3		44.0
80	Mercury	E1	ug/dscm	y		45.3		27.3		25.4		32.6
81	Nickel	E1	ug/dscm	y		53.8		30.5		28.5		37.6
82	Selenium	E1	ug/dscm	y	nd	35.0	nd	31.3	nd	31.7		32.7
83	Silver	E1	ug/dscm	y		3.0		1.8		1.7		2.2
84	Thallium	E1	ug/dscm	y	nd	350.3	nd	312.7	nd	317.0		326.6
85	Zinc	E1	ug/dscm	y		563.8		400.8		420.0		461.6
86	SVM	E1	ug/dscm	y		1222.5		1139.2		1015.1		1125.6
87	LVM	E1	ug/dscm	y		68.2		56.4		55.8		60.1
88												
89	**609C13**	**Trial Burn**				R1		R2		R3		Cond Avg
90												
91	PM	E1	gr/dscf	y		0.0152		0.0138		0.0158		0.0149
92												
93	HCl		lb/hr			0.32		0.33		0.42		
94	Cl2		lb/hr		nd	0.14	nd	0.16	nd	0.16		
95												
96	Antimony		g/hr			101		95		122		
97	Arsenic		g/hr			15		14		15		
98	Beryllium		g/hr			1.2	nd	1.1	nd	1.5		
99	Cadmium		g/hr			21		16		20		
100	Chromium		g/hr			2.14		2.05		2.57		
101	Chromium (Hex)		g/hr			0.16		0.35		0.23		
102	Lead		g/hr			418		326		497		
103	Barium		g/hr			7.5		5		5.3		
104	Mercury		g/hr			5.5		6.3		5.2		
105	Nickel		g/hr			3		3.9		3.3		
106	Selenium		g/hr		nd	4.3	nd	4	nd	4.1		
107	Silver		g/hr			0.59		0.46		0.35		
108	Thallium		g/hr		nd	43	nd	40	nd	41		
109	Zinc		g/hr			66		50		53		
110												
111	Sampling Train	PM, metals	E1									
112	Stack Gas Flowrate		dscfm			74080		71358		72439		72625.7
113	O2		%			7.7		7.1		7.4		7.4
114	Moisture		%			3.6		3.2		3.3		3.4
115	Temperature		°F			113.7		115		113.5		114.1
116												
117	Sampling Train	HCl/Cl2	E2									
118	Stack Gas Flowrate		dscfm			74911		72505		74842		74086.0
119	O2		%			7.6		7.1		7.4		7.4
120	Moisture		%			3.5		3.4		3.2		3.4
121	Temperature		°F			112.2		113.7		112.1		112.7
122												
123	Sampling Train	Cr+6	E3									
124	Stack Gas Flowrate		dscfm			72066		71904		72391		72120.3
125	O2		%			7.6		7.1		7.4		7.4
126	Moisture		%			3.3		2.9		2.8		3.0
127	Temperature		°F			114		115.2		113.5		114.2
128												
129	HCl	E2	ppmv	y		0.8		0.8		1.0		0.88
130	Cl2	E2	ppmv	y	nd	0.2	nd	0.2	nd	0.2		0.20
131	Total Chlorine	E2	ppmv	y	31	1.16	##	1.23	##	1.44	##	1.27
132												
133	Antimony	E1	ug/dscm	y		845.2		789.7		1021.0		885.3
134	Arsenic	E1	ug/dscm	y		125.5		116.4		125.5		122.5
135	Beryllium	E1	ug/dscm	y		10.0		9.1		12.6		10.6
136	Cadmium	E1	ug/dscm	y		175.7		133.0		167.4		158.7
137	Chromium	E1	ug/dscm	y		17.9		17.0		21.5		18.8
138	Chromium (Hex)	E1	ug/dscm	y		1.3		2.9		1.9		2.1
139	Lead	E1	ug/dscm	y		3498.0		2709.9		4159.4		3455.8
140	Barium	E1	ug/dscm	y		62.8		41.6		44.4		49.6
141	Mercury	E1	ug/dscm	y		46.0		52.4		43.5		47.3
142	Nickel	E1	ug/dscm	y		25.1		32.4		27.6		28.4

	B	C	D	E	F	G	H	I	J	K	L	M
143	Selenium	E1	ug/dscm	y	nd	36.0	nd	33.3	nd	34.3		34.5
144	Silver	E1	ug/dscm	y		4.9		3.8		2.9		3.9
145	Thallium	E1	ug/dscm	y	nd	359.8	nd	332.5	nd	343.1		345.2
146	Zinc	E1	ug/dscm	y		552.3		415.6		443.6		470.5
147	SVM	E1	ug/dscm	y		3673.7		2842.9		4326.8		3614.5
148	LVM	E1	ug/dscm	y		153.5		142.6		159.6		151.9
149												
150	**609C12A**	**Trial Burn**				R1		R2		R3		Cond Avg
151												
152	PM	E1	gr/dscf	y		0.0186		0.0133		0.0192		0.0170
153												
154	HCl		lb/hr			1		0.9		1.4		
155	Cl2		lb/hr		nd	0.06	nd	0.3	nd	0.32		
156												
157	POHC DRE	1,2-Dichlorobenzene										
158	POHC Feedrate		lb/hr			990		889		687		
159	Emission Rate	E1	lb/hr		nd	3.20E-04	nd	3.00E-04	nd	3.00E-04		
160	DRE	E1	%			99.99997		99.99997		99.99996		
161												
162	POHC DRE	1,2,4,5-Tetrachlorobenzene										
163	POHC Feedrate		lb/hr			921		900		996		
164	Emission Rate	E1	lb/hr		nd	3.20E-04	nd	3.00E-04	nd	3.00E-04		
165	DRE	E1	%			99.99997		99.99997		99.99997		
166												
167												
168	Sampling Train	PM	E1									
169	Stack Gas Flowrate		dscfm			52281		58770		59746		56932.3
170	O2		%			10.6		10.1		10.1		10.3
171	Moisture		%			5.1		5		4.7		4.9
172	Temperature		°F			145.8		134.9		135.3		138.7
173												
174	Sampling Train	HCl/Cl2	E2									
175	Stack Gas Flowrate		dscfm			58251		60501		59382		59378.0
176	O2		%			10.6		10.1		10.1		10.3
177	Moisture		%			5.1		5		4.7		4.9
178	Temperature		°F			135.5		133.6		135.4		134.8
179												
180	Sampling Train	DRE	E3									
181	Stack Gas Flowrate		dscfm			54066		56024		51892		53994.0
182	O2		%			10.6		10.1		10.1		10.3
183	Moisture		%			5.1		5		4.7		4.9
184	Temperature		°F			134.1		133.3		134.7		134.0
185												
186	HCl	E2	ppmv	y		2.5		2.1		3.4		2.68
187	Cl2	E2	ppmv	y	nd	0.1	nd	0.4	nd	0.4		0.28
188	Total Chlorine	E2	ppmv	y	6	2.63	##	2.87	##	4.24	##	3.25
189												
190												
191	**609C12B**	**Trial Burn**				R1		R2		R3		Cond Avg
192												
193	PM	E1	gr/dscf	y		0.0153		0.0131		0.0145		0.0143
194												
195	HCl		lb/hr			0.77		0.87		0.79		
196	Cl2		lb/hr		nd	0.13		0.14	nd	0.1		
197												
198	POHC DRE	1,2-Dichlorobenzene										
199	POHC Feedrate		lb/hr			1069		1087		1034		
200	Emission Rate	E1	lb/hr		nd	2.30E-04	nd	2.30E-04	nd	2.30E-04		
201	DRE	E1	%			99.99998		99.99998		99.99998		
202												
203	POHC DRE	1,2,4,5-Tetrachlorobenzene										
204	POHC Feedrate		lb/hr			1016		1071		1044		
205	Emission Rate	E1	lb/hr		nd	2.30E-04	nd	2.30E-04	nd	2.30E-04		
206	DRE	E1	%			99.99998		99.99998		99.99998		
207												
208	Sampling Train	PM	E1									
209	Stack Gas Flowrate		dscfm			47570		49140		47930		48213.3
210	O2		%			9.6		9		9.7		9.4
211	Moisture		%			6		6		5.5		5.8
212	Temperature		°F					128.5		125.3		126.9
213												

	B	C	D	E	F	G	H	I	J	K	L	M
214	Sampling Train	HCl/Cl2	E2									
215	Stack Gas Flowrate		dscfm			46090		48513		47653		47418.7
216	O2		%			9.6		9		9.7		9.4
217	Moisture		%			6		6		5.5		5.8
218	Temperature		°F			126.5		128.9		125.9		127.1
219												
220	Sampling Train	DRE	E3									
221	Stack Gas Flowrate		dscfm			46996		48753		47812		47853.7
222	O2		%			9.6		9		9.7		9.4
223	Moisture		%			5.7		6		5.7		5.8
224	Temperature		°F			128.9		130.5		128.1		129.2
225												
226	HCl	E2	ppmv	y		1.9		2.1		1.9		1.97
227	Cl2	E2	ppmv	y	nd	0.2		0.2	nd	0.1		0.15
228	Total Chlorine	E2	ppmv	y	15	2.23		2.41	##	2.19	##	2.28

	B	C	D	E	F	G	H	I	J	K	L	M
1	**Stack Gas Emissions 2**											
2												
3												
4	**609C1**					R1		R2		R3		Cond Avg
5												
6	PM	E2	gr/dscf	y		0.0172		0.0098		0.0113		0.0127
7	CO (RA)	E2	ppmv	y	nd	0.5		1.0		2.5		1.3
8	HC (RA)	E2	ppmv	y		1.5		1.5		0.5		1.2
9	HCl	E2	ppmv	y		1.8		1.0		0.7		1.1
10	Cl2	E2	ppmv	y		0.0		0.0		0.0		0.0
11	Total Chlorine	E2	ppmv	y		1.8		1.0		0.7		1.2
12	Antimony	E3	ug/dscm	y		42.6		40.0		87.7		56.8
13	Arsenic	E3	ug/dscm	y		39.9		58.5		77.4		58.6
14	Barium	E3	ug/dscm	y		46.8		24.2		65.3		45.4
15	Beryllium	E3	ug/dscm	y	nd	0.1	nd	0.1	nd	0.1		0.1
16	Cadmium	E3	ug/dscm	y		34.2		33.8		61.1		43.0
17	Chromium	E3	ug/dscm	y		22.3		16.9		30.0		23.1
18	Copper	E3	ug/dscm	y		898.5		688.5		656.7		747.9
19	Iron	E3	ug/dscm	y		495.4		203.2		219.4		306.0
20	Lead	E3	ug/dscm	y		887.0		647.8		1761.2		1098.7
21	Mercury	E3	ug/dscm	y		20.3		13.4		68.3		34.0
22	Nickel	E3	ug/dscm	y		102.5		57.4		47.1		69.0
23	Silver	E3	ug/dscm	y		4.1		4.0		5.2		4.4
24	Thallium	E3	ug/dscm	y		26.3		31.9		58.8		39.0
25	Vanadium	E3	ug/dscm	y		6.3		1.9		0.1		2.8
26	SVM	E3	ug/dscm	y		921.2		681.6		1822.3		1141.7
27	LVM	E3	ug/dscm	y	0	62.4	0.2	75.5	##	107.5	0	81.8
28												
29	PCBs	E1	%			99.999997		99.999998		99.999997		
30												
31	Sampling Train	Dioxin & Fu	E1									
32	Stack Gas Flowrate		dscfm			83902.0		84467.0		79913.0		
33	O2		%			8.1		7.7		8.0		
34	Moisture		%			2.4		2.2		2.4		
35	Temperature		°F			104.9		106.3		113.1		
36												
37	Sampling Train	PM/Haloge	E2									
38	Stack Gas Flowrate		dscfm			89407.0		82658.0		75251.0		
39	O2		%			8.1		7.7		8.0		
40	Moisture		%			2.8		2.4		3.0		
41	Temperature		°F			104.4		105.6		112.9		
42												
43	Sampling Train	Metals	E3									
44	Stack Gas Flowrate		dscfm			83874.0		81840.0		74037.0		
45	O2		%			8.1		7.7		8.0		
46	Moisture		%			2.4		2.6		2.8		
47	Temperature		°F			104.0		105.3		112.8		

	B	C	D	AT	AV	AX	AZ	BB	BD	BF	BH	BJ	BL
1	**Feedstream 1**												
2													
3													
4	**609C10**	**Risk burn**											
5													
6	Feedstream Description												
7	Feed Rate		lb/hr										
8	Thermal Feedrate		MMBtu/hr										
9													
10	**609C11**	**Risk burn**		R1	R2	R3	Cond Avg	R1	R2	R3	Cond Avg	R1	R2
11													
12	Feedstream Number			F1	F1	F1	F1	F2	F2	F2	F2	F3	F3
13	Feed Class							Spike	Spike	Spike	Spike	Total	Total
14	Feedstream Description			Haz wastes	Haz wastes	Haz wastes	Haz wastes	Spike	Spike	Spike	Spike	Total	Total
15	Feed Class 2			HW	HW	HW	HW	Spike	Spike	Spike	Spike	Total	Total
16	Feed Rate		lb/hr	40213	40640	39394	40082.3					40213	40640
17	Heating Value		Btu/lb										
18	Density		kg/L										
19	Chlorine		g/hr	878134	885112	833414	865553.3					878134	885112
20	Antimony		g/hr	122.3	122.1	129.0	124.5					122.3	122.1
21	Arsenic		g/hr	53.44	53.93	50.27	52.5	899	899	941	913	952.44	952.93
22	Barium		g/hr	2274.72	2177.7	2083.3	2178.6					2274.7	2177.7
23	Beryllium		g/hr	0	0	0	0.0	227	227	237	230.3	227	227
24	Cadmium		g/hr	0	1.6	5	2.1	225	225	235	228.3	225	226.6
25	Chromium		g/hr	1385.7	1376	1289	1350.2	1800	1800	1883	1828	3185.7	3176
26	Lead		g/hr	737	610.3	589.1	645.5	8865	8865	9273	9001	9602	9475.3
27	Mercury		g/hr	3.0228	3.4964	3.0537	3.2					3.0228	3.4964
28	Nickel		g/hr	2308.7	2239.6	2112.2	2220.2					2308.7	2239.6
29	Selenium		g/hr	12.37	11.9	11.46	11.9					12.37	11.9
30	Silver		g/hr	14.073	13.99	13.89	14.0					14.073	13.99
31	Thallium		g/hr	3.4	3.3	3.1	3.3					3.4	3.3
32	Zinc		g/hr	9519	9498	9887	9634.7					9519	9498
33													
34	Stack Gas Flowrate		dscfm	71545.7								70963	71422
35	Oxygen		%	6.9								7.4	6.6
36													
37	Thermal Feedrate		MMBtu/hr										
38	Estimated Firing Rate		MMBtu/hr									306.38	326.50
39													
40	*Feedrate MTEC Calculations*												
41	Chlorine		ug/dscm	7160168	7217065	6795528	7057587					7160168	7217065
42	Antimony		ug/dscm	997	995	1052	1015					997	995
43	Arsenic		ug/dscm	436	440	410	428	7330	7330	7673	7444	7766	7770
44	Barium		ug/dscm	18548	17757	16987	17764					18548	17757
45	Beryllium		ug/dscm	0	0	0	0	1851	1851	1932	1878	1851	1851
46	Cadmium		ug/dscm	0	13	41	18	1835	1835	1916	1862	1835	1848
47	Chromium		ug/dscm	11299	11220	10510	11010	14677	14677	15354	14903	25976	25897
48	Lead		ug/dscm	6009	4976	4803	5263	72284	72284	75611	73393	78293	77260
49	Mercury		ug/dscm	25	29	25	26					25	29
50	Nickel		ug/dscm	18825	18261	17223	18103					18825	18261
51	Selenium		ug/dscm	101	97	93	97					101	97
52	Silver		ug/dscm	115	114	113	114					115	114
53	Thallium		ug/dscm	28	27	25	27					28	27
54	Zinc		ug/dscm	77616	77445	80617	78560					77616	77445
55	SVM		ug/dscm	6009	4989	4844	5281	74118	74118	77527	75255	80128	79108
56	LVM		ug/dscm	11735	11659	10920	11438	23858	23858	24959	24225	35593	35518
57													
58	**609C13**	**Trial burn**		R1	R2	R3	Cond Avg	R1	R2	R3	Cond Avg	R1	R2
59													
60	Feedstream Number			F1	F1	F1	F1	F2	F2	F2	F2	F3	F3

	B	BN	BP	BR	BT	BV	BX
1	**Feedstream 1**						
2							
3							
4	**609C10**						
5							
6	Feedstream Description						
7	Feed Rate						
8	Thermal Feedrate						
9							
10	**609C11**	R3	Cond Avg				
11							
12	Feedstream Number	F3	F3				
13	Feed Class	Total	Total				
14	Feedstream Description	Total	Total				
15	Feed Class 2	Total	Total				
16	Feed Rate	39394	40082				
17	Heating Value						
18	Density						
19	Chlorine	833414	865553.3				
20	Antimony	129.0	124.5				
21	Arsenic	991.27	965.5				
22	Barium	2083.3	2178.6				
23	Beryllium	237	230.3				
24	Cadmium	240	230.4				
25	Chromium	3172	3177.9				
26	Lead	9862.1	9646.5				
27	Mercury	3.0537	3.2				
28	Nickel	2112.2	2220.2				
29	Selenium	11.46	11.9				
30	Silver	13.89	14.0				
31	Thallium	3.1	3.3				
32	Zinc	9887	9634.7				
33							
34	Stack Gas Flowrate	72252	71545.7				
35	Oxygen	6.6	6.9				
36							
37	Thermal Feedrate						
38	Estimated Firing Rate	330.29	321.01				
39							
40	*Feedrate MTEC Calculations*						
41	Chlorine	6795528	7057587				
42	Antimony	1052	1015				
43	Arsenic	8083	7873				
44	Barium	16987	17764				
45	Beryllium	1932	1878				
46	Cadmium	1957	1880				
47	Chromium	25864	25912				
48	Lead	80414	78656				
49	Mercury	25	26				
50	Nickel	17223	18103				
51	Selenium	93	97				
52	Silver	113	114				
53	Thallium	25	27				
54	Zinc	80617	78560				
55	SVM	82371	80536				
56	LVM	35879	35663				
57							
58	**609C13**	R3	Cond Avg				
59							
60	Feedstream Number	F3	F3				

	B	C	D	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM
61	Feed Class											Spike		Spike		Spike		Spike		Total		Total	
62	Feed Class 2			HW		HW		HW		HW		Spike		Spike		Spike		Spike		Total		Total	
63	Feedstream Description			Haz wastes		Haz wastes		Haz wastes		Haz wastes		Spike		Spike		Spike		Spike		Total		Total	
64	Feed Rate		lb/hr	35515		36773		36024		36104.0										35515		36773	
65	Thermal Feedrate		MM Btu/hr																				
66	Heating Value		Btu/lb																				
67	Density		kg/L																				
68	Chlorine		g/hr	922074		964296		939326		941898.7										922074		964296	
69	Antimony		g/hr	6929		6925		6858		6904.0		23078		23275		23374		23242.3		30007		30200	
70	Arsenic		g/hr	741		736		740		739.0		1549		1563		1569		1560.3		2290		2299	
71	Barium		g/hr	4006		3971		4081		4019.3										4006		3971	
72	Beryllium		g/hr	272		272		272		272.0		621		626		629		625.3		893		898	
73	Cadmium		g/hr	418		421		420		419.7		775		781		785		780.3		1193		1202	
74	Chromium		g/hr	5303		5287		5370		5320.0		5349		5394		5417		5386.7		10652		10681	
75	Lead		g/hr	11541		11658		11570		11589.7		33541		33828		33972		33780.3		45082		45486	
76	Mercury		g/hr	29		28		30		29.0										29		28	
77	Nickel		g/hr	1890		1863		2007		1920.0										1890		1863	
78	Selenium		g/hr	22		22		23		22.3										22		22	
79	Silver		g/hr	22		23		24		23.0										22		23	
80	Thallium		g/hr	6.5		6.4		6.9		6.6										6.5		6.4	
81	Zinc		g/hr	4221		4138		4485		4281.3										4221		4138	
82																							
83	Stack Gas Flowrate		dscfm	72625.7																74080		71358	
84	Oxygen		%	7.4																7.7		7.1	
85																							
86	Thermal Feedrate		MMBtu/hr																				
87	Estimated Firing Rate		MMBtu/hr																	312.8		314.9	
88																							
89	*Feedrate MTEC Calculations*																						
90	Chlorine		ug/dscm	7697099		8049551		7841112		7862587										7697099		8049551	
91	Antimony		ug/dscm	57840		57807		57248		57632										57840		57807	
92	Arsenic		ug/dscm	6186		6144		6177		6169		12930		13047		13097		13025		19116		19191	
93	Barium		ug/dscm	33440		33148		34067		33552										33440		33148	
94	Beryllium		ug/dscm	2271		2271		2271		2271		5184		5226		5251		5220		7454		7496	
95	Cadmium		ug/dscm	3489		3514		3506		3503		6469		6519		6553		6514		9959		10034	
96	Chromium		ug/dscm	44267		44134		44827		44409		44651		45027		45219		44966		88919		89161	
97	Lead		ug/dscm	96340		97316		96582		96746		279987		282382		283584		281985		376326		379699	
98	Mercury		ug/dscm	242		234		250		242										242		234	
99	Nickel		ug/dscm	15777		15552		16754		16027										15777		15552	
100	Selenium		ug/dscm	184		184		192		186										184		184	
101	Silver		ug/dscm	184		192		200		192										184		192	
102	Thallium		ug/dscm	54		53		58		55										54		53	
103	Zinc		ug/dscm	35235		34542		37439		35739										35235		34542	
104	SVM		ug/dscm	99829		100831		100088		100249		286456		288902		290137		288498		386285		389732	
105	LVM		ug/dscm	52723		52548		53274		52849		62766		63300		63567		63211		115489		115848	
106																							
107	**609C12A**	**Trial burn**		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2	
108																							
109	Feedstream Number			F1		F1		F1		F1		F2		F2		F2		F2		F3		F3	
110	Feed Class																			Total		Total	
111	Feed Class 2			HW		HW		HW		HW										Total		Total	
112	Feedstream Description			Haz wastes		Haz wastes		Haz wastes		Haz wastes		ABC		ABC		ABC		ABC		Total		Total	
113	Feed Rate		lb/hr	13445		12689		13162		13098.7		13142		13555		14000		13565.7		26587		26244	
114	Thermal Feedrate		MM Btu/hr																				
115	Heating Value		Btu/lb																				
116	Density		kg/L																				
117	Ash		lb/hr	9514		8722		9047		9094.3		509		764		778		683.7		10023		9486	
118	Chlorine		lb/hr	3931		4009		4321		4087.0										3931		4009	
119																							
120	Stack Gas Flowrate		dscfm	56932.3																52281		58770	

	B	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX
61	Feed Class	Total		Total								
62	Feed Class 2	Total		Total								
63	Feedstream Description	Total		Total								
64	Feed Rate	36024		36104								
65	Thermal Feedrate											
66	Heating Value											
67	Density											
68	Chlorine	939326		941898.7								
69	Antimony	30232		30146.3								
70	Arsenic	2309		2299.3								
71	Barium	4081		4019.3								
72	Beryllium	901		897.3								
73	Cadmium	1205		1200.0								
74	Chromium	10787		10706.7								
75	Lead	45542		45370.0								
76	Mercury	30		29.0								
77	Nickel	2007		1920.0								
78	Selenium	23		22.3								
79	Silver	24		23.0								
80	Thallium	6.9		6.6								
81	Zinc	4485		4281.3								
82												
83	Stack Gas Flowrate	72439		72626								
84	Oxygen	7.4		7.4								
85												
86	Thermal Feedrate											
87	Estimated Firing Rate	312.8		313.6								
88												
89	*Feedrate MTEC Calculations*											
90	Chlorine	7841112		7862587								
91	Antimony	57248		57632								
92	Arsenic	19275		19194								
93	Barium	34067		33552								
94	Beryllium	7521		7491								
95	Cadmium	10059		10017								
96	Chromium	90045		89375								
97	Lead	380166		378730								
98	Mercury	250		242								
99	Nickel	16754		16027								
100	Selenium	192		186								
101	Silver	200		192								
102	Thallium	58		55								
103	Zinc	37439		35739								
104	SVM	390225		388747								
105	LVM	116841		116059								
106												
107	**609C12A**	R3		Cond Avg								
108												
109	Feedstream Number	F3		F3								
110	Feed Class	Total		Total								
111	Feed Class 2	Total		Total								
112	Feedstream Description	Total		Total								
113	Feed Rate	27162		26664								
114	Thermal Feedrate											
115	Heating Value											
116	Density											
117	Ash	9825		9778.0								
118	Chlorine	4321		4087.0								
119												
120	Stack Gas Flowrate	59746		56932								

	B	C	D	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM
121	Oxygen		%	10.3																10.6		10.1	
122																							
123	Thermal Feedrate		MMBtu/hr																				
124	Estimated Firing Rate		MMBtu/hr																	172.61		203.36	
125																							
126	*Feedrate MTEC Calculations*																						
127	Ash		mg/dscm	58279		53428		55419		55709		3118		4680		4766		4188		61397		58108	
128	Chlorine		ug/dscm	24079954		24557755		26468959		25035556										24079954		24557755	
129																							
130	**609C12B**	**Trial burn**		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2	
131																							
132	Feedstream Number			F1		F1		F1		F1		F2		F2		F2		F2		F3		F3	
133	Feed Class																						
134	Feed Class 2			HW		HW		HW		HW													
135	Feedstream Description			Haz wastes		Haz wastes		Haz wastes		Haz wastes		ABC		ABC		ABC		ABC		RR		RR	
136	Feed Rate		lb/hr	18142		17492		15675		17103.0		11300		11775		12309		11794.7		14174		12164	
137	Thermal Feedrate		MM Btu/hr																				
138	Heating Value		Btu/lb																				
139	Density		kg/L																				
140	Ash		lb/hr	16497		14888		15580		15655.0		664		781		883		776.0					
141	Chlorine		lb/hr	4369		4543		5116		4676.0													
142																							
143	Stack Gas Flowrate		dscfm	48213.3																			
144	Oxygen		%	9.4																			
145																							
146	Thermal Feedrate		MMBtu/hr																				
147	Estimated Firing Rate		MMBtu/hr																				
148																							
149	*Feedrate MTEC Calculations*																						
150	Ash		mg/dscm	110733		99933		104578		105081		4457		5242		5927		5209					
151	Chlorine		ug/dscm	29326003		30493941		34340085		31386676													

	B	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX
121	Oxygen	10.1		10.3								
122												
123	Thermal Feedrate											
124	Estimated Firing Rate	206.74		193.99								
125												
126	*Feedrate MTEC Calculations*											
127	Ash	60185		59897								
128	Chlorine	26468959		25035556								
129												
130	**609C12B**	R3		Cond Avg		R1		R2		R3		Cond Avg
131												
132	Feedstream Number	F3		F3		F4		F4		F4		F4
133	Feed Class					Total		Total		Total		Total
134	Feed Class 2					Total		Total		Total		Total
135	Feedstream Description	RR		RR		Total		Total		Total		Total
136	Feed Rate	14315		13551.0		43616		41431		42299		42449
137	Thermal Feedrate											
138	Heating Value											
139	Density											
140	Ash					17161		15669		16463		16431
141	Chlorine					4369		4543		5116		4676
142												
143	Stack Gas Flowrate					46090		48513		47653		47419
144	Oxygen					9.6		9		9.7		9.4
145												
146	Thermal Feedrate											
147	Estimated Firing Rate					166.80		184.81		170.95		174.12
148												
149	*Feedrate MTEC Calculations*											
150	Ash					115190		105175		110504		110290
151	Chlorine					29326003		30493941		34340085		31386676

	B	C	D	E	F	G	H	I	J	K	L
1	**Feedstream 2**										
2											
3											
4	**609C1**				R1		R2		R3		Cond Avg
5											
6	Feedstream Number				F1		F1		F1		F1
7	Feed Class				Total		Total		Total		Total
8	Feed Class 2				Total		Total		Total		Total
9	Feedstream				Total		Total		Total		Total
10	Chlorine		lb/hr		1250		865		683		
11			Train I + Train II								
12	Gas Flowrate				89407		82658		75251		82438.67
13	Oxygen				8.13		7.65		7.98		7.92
14											
15	Estimated Firing Rate		MMBtu/hr		365.3		350.3		311.0		342.3
16											
17	Feedrate MTECs										
18	Chlorine		ug/dscm		4066363		2934244		2609418		3203341

	B	C	D	E	F	G
1	**Process Information**					
2						
3	**609C10**			R1	R2	R3
4						
5	Train I					
6	Combustion Chamber Temp (min)	°F		1815	1807	1838
7	AB Temperature	°F		213	2141	2138
8	Water Flow Saturator	gpm		1008.0	1007	1008
9	Water Flow Condenser	gpm		4370.00	4374	4375
10	Water Flow Calvert	gpm		1005	989	1013
11	Calvert Pressure	in H2O		47.4	47.3	47.6
12	Train II					
13	Combustion Chamber Temp (min)	°F		1843	1887	1909
14	RR Temperature	°F		1207	1191	1167
15	AB Temperature	°F		1865.0	1902	1871
16	Water Flow Saturator	gpm		922.00	922	922
17	Water Flow Condenser	gpm		4515	4518	4527
18	Water Flow Calvert	gpm		819	851	811
19	Calvert Pressure	in H2O		48.7	49.7	49.5
20						
21	**609C11**			R1	R2	R3
22						
23	Train I					
24	Combustion Chamber Temp (min)	°F		1910.00	1939	1960
25	AB Temperature	°F		2273	2248	2256
26	Water Flow Saturator	gpm		1008	1009	1007
27	Water Flow Condenser	gpm		4364.0	4366	4363
28	Water Flow Calvert	gpm		1020	1009	1012
29	Calvert Pressure	in H2O		47.9	48.6	48.7
30	Train II					
31	Combustion Chamber Temp (min)	°F		2182	2170	2152
32	RR Temperature	°F		1265	1271	1245
33	AB Temperature	°F		2139.0	2155	2128
34	Water Flow Saturator	gpm		918.00	918	919
35	Water Flow Condenser	gpm		4509.0	4516	4510
36	Water Flow Calvert	gpm		759	775	775
37	Calvert Pressure	in H2O		49.8	48.9	49
38						
39	**609C13**			R1	R2	R3
40						
41	Train I					
42	Combustion Chamber Temp (min)	°F		2068	2072	2011
43	AB Temperature	°F		2241	2241	2233
44	Water Flow Saturator	gpm		900	903	896
45	Water Flow Condenser	gpm		3974	3972	3968
46	Water Flow Calvert	gpm		885	918	956
47	Calvert Pressure	in H2O		43.7	44.5	45.5
48	Train II					
49	Combustion Chamber Temp (min)	°F		2275	2444	2378
50	RR Temperature	°F		1601	1574	1570
51	AB Temperature	°F		2213	2252	2253
52	Water Flow Saturator	gpm		789	786	786
53	Water Flow Condenser	gpm		4071	4064	4062
54	Water Flow Calvert	gpm		626	828	729
55	Calvert Pressure	in H2O		47.8	48.6	48.1
56						
57	**609C12A**			R1	R2	R3
58						
59	Combustion Chamber Temp (min)	°F		1608	1616	1631
60	AB Temperature	°F		1808	1829	1844
61	Water Flow Saturator	gpm		932	790	785
62	Water Flow Condenser	gpm		3866	3866	3869
63	Water Flow Calvert	gpm		852	758	775
64	Calvert Pressure	in H2O		40.09	41.68	41.77
65						
66	**609C12B**			R1	R2	R3
67						
68	Combustion Chamber Temp (min)	°F		1627	1580	1675
69	RR Temperature	°F		906	928	908

	B	C	D	E	F	G
70	AB Temperature	^{o}F		1821	1789	1776
71	Water Flow Saturator	gpm		729	728	723
72	Water Flow Condenser	gpm		4010	4021	4026
73	Water Flow Calvert	gpm		826	819	816
74	Calvert Pressure	in H2O		45.37	44.47	45.41

	C	D	E	F	G
1	**Process Information 2**				
2					
3	**609C1**		R1	R2	R3
4					
5	Afterburner 1 Temperature	F	2084	2131	2038
6	Afterburner 2 Temperature	F	2246	2207	2300
7	Kiln 1 Temperature	F	1813	2021	1947
8	Kiln 2 Temperature	F	1969	2323	2206
9	Rotary Reactor Temperature	F	1352	1320	1399

PCDD/PCDF

N

Facility Name and ID: Safety-Kleen Inc.

Condition ID: 609C10

Condition/Test Date: Risk burn organics, max RR feed, low temp-Condition 1

	I-TEF Wght Fact		Run 7 Total Full ND	Run 7 TEQ Full ND	Run 7 Total 1/2 ND	Run 7 TEQ 1/2 ND		Run 8 Total Full ND	Run 8 TEQ Full ND	Run 8 Total 1/2 ND	Run 8 TEQ 1/2 ND		Run 9 Total Full ND	Run 9 TEQ Full ND	Run 9 Total 1/2 ND	Run 9 TEQ 1/2 ND
Detected in sample volume (ng)																
2,3,7,8-TCDD	1	nd	0.007	0.007	0.004	0.004	nd	0.003	0.0034	0.0017	0.0017	nd	0.004	0.0041	0.0021	0.0021
1,2,3,7,8-PCDD	0.5	nd	0.008	0.004	0.004	0.002	nd	0.014	0.0070	0.0070	0.0035	nd	0.003	0.0016	0.0016	0.0008
1,2,3,4,7,8-HxCDD	0.1	nd	0.009	0.001	0.005	0.000	nd	0.008	0.0008	0.0039	0.0004	nd	0.011	0.0011	0.0055	0.0006
1,2,3,6,7,8-HxCDD	0.1	nd	0.009	0.001	0.005	0.000	nd	0.008	0.0008	0.0038	0.0004	nd	0.011	0.0011	0.0055	0.0006
1,2,3,7,8,9-HxCDD	0.1	nd	0.009	0.001	0.004	0.000	nd	0.007	0.0007	0.0035	0.0004	nd	0.010	0.0010	0.0050	0.0005
1,2,3,4,6,7,8-HpCDD	0.01	nd	0.007	0.000	0.003	0.000	nd	0.010	0.0001	0.0050	0.0001	nd	0.015	0.0002	0.0075	0.0001
OCDD	0.001	nd	0.052	0.000	0.026	0.000	nd	0.054	0.0001	0.0270	0.0000	nd	0.077	0.0001	0.0385	0.0000
2,3,7,8-TCDF	0.1		0.015	0.002	0.015	0.002		0.018	0.0018	0.0180	0.0018		0.013	0.0013	0.0130	0.0013
1,2,3,7,8-PCDF	0.05	nd	0.011	0.001	0.006	0.000	nd	0.006	0.0003	0.0030	0.0002	nd	0.007	0.0003	0.0033	0.0002
2,3,4,7,8-PCDF	0.5	nd	0.012	0.006	0.006	0.003	nd	0.006	0.0031	0.0031	0.0016	nd	0.007	0.0034	0.0034	0.0017
1,2,3,4,7,8-HxCDF	0.1	nd	0.007	0.001	0.004	0.000	nd	0.018	0.0018	0.0090	0.0009	nd	0.010	0.0010	0.0050	0.0005
1,2,3,6,7,8-HxCDF	0.1	nd	0.012	0.001	0.006	0.001	nd	0.018	0.0018	0.0090	0.0009	nd	0.003	0.0003	0.0016	0.0002
2,3,4,6,7,8-HxCDF	0.1	nd	0.013	0.001	0.007	0.001	nd	0.019	0.0019	0.0095	0.0010	nd	0.004	0.0004	0.0018	0.0002
1,2,3,7,8,9-HxCDF	0.1	nd	0.014	0.001	0.007	0.001	nd	0.022	0.0022	0.0110	0.0011	nd	0.004	0.0004	0.0020	0.0002
1,2,3,4,6,7,8-HpCDF	0.01	nd	0.024	0.000	0.012	0.000	nd	0.015	0.0002	0.0075	0.0001	nd	0.024	0.0002	0.0120	0.0001
1,2,3,4,7,8,9-HpCDF	0.01	nd	0.006	0.000	0.003	0.000	nd	0.004	0.0000	0.0018	0.0000	nd	0.011	0.0001	0.0055	0.0001
OCDF	0.001	nd	0.029	0.000	0.015	0.000	nd	0.017	0.0000	0.0085	0.0000	nd	0.024	0.0000	0.0120	0.0000
Total TCDD	0		0.043	0.000	0.043	0.000		0.011	0.0000	0.0110	0.0000		0.014	0.0000	0.0140	0.0000
Total PCDD	0	nd	0.010	0.000	0.005	0.000	nd	0.014	0.0000	0.0070	0.0000	nd	0.015	0.0000	0.0075	0.0000
Total HxCDD	0	nd	0.009	0.000	0.005	0.000	nd	0.008	0.0000	0.0039	0.0000	nd	0.011	0.0000	0.0055	0.0000
Total HpCDD	0	nd	0.013	0.000	0.007	0.000	nd	0.010	0.0000	0.0050	0.0000	nd	0.017	0.0000	0.0085	0.0000
Total TCDF	0		0.460	0.000	0.460	0.000		0.130	0.0000	0.1300	0.0000		0.080	0.0000	0.0800	0.0000
Total PCDF	0	nd	0.024	0.000	0.012	0.000	nd	0.014	0.0000	0.0070	0.0000	nd	0.011	0.0000	0.0055	0.0000
Total HxCDF	0	nd	0.014	0.000	0.007	0.000	nd	0.022	0.0000	0.0110	0.0000	nd	0.010	0.0000	0.0050	0.0000
Total HpCDF	0	nd	0.024	0.000	0.012	0.000	nd	0.015	0.0000	0.0075	0.0000	nd	0.024	0.0000	0.0120	0.0000
Gas sample volume (dscf)				130.31	130.31	130.31			130.31	130.31	130.31			130.70	130.70	130.70
O2 (%)				8.5	8.5	8.5			8.2	8.2	8.2			8.40	8.40	8.40
PCDD/PCDF (ng in sample)				0.03	0.6	0.01			0.026	0.2	0.014			0.02	0.2	0.01
PCDD/PCDF (ng/dscm @ 7% O2)		94.5		0.0082	0.18	0.0043	93.0		0.0077	0.06	0.0041	92.1		0.0050	0.06	0.0027
TEQ Cond Avg	0.0037															
Total Cond Avg	0.10															

	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	**609C1**													
2					R1				R2				R3	
3	ng/dscm	I-TEF		Total	Total	TEQ		Total	Total	TEQ		Total	Total	TEQ
4		Wt Fact		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND
5	4D 2378	1	1	0.002	0.001	0.001	1	0.001	0.000	0.000	1	0.002	0.001	0.001
6	4D Other	0	1	0.000	0.000	0.000		0.001	0.001	0.000	1	0.003	0.001	0.000
7	4D Total	0	1	0.002	0.001	0.000		0.002	0.002	0.000	1	0.005	0.002	0.000
8	5D 12378	0.5	1	0.002	0.001	0.001	1	0.001	0.001	0.000	1	0.002	0.001	0.001
9	5D Other	0	1	0.000	0.000	0.000	1	0.000	0.000	0.000	1	0.005	0.002	0.000
10	5D Total	0	1	0.002	0.001	0.000	1	0.001	0.001	0.000	1	0.007	0.003	0.000
11	6D 123478	0.1	1	0.006	0.003	0.000	1	0.002	0.001	0.000	1	0.007	0.003	0.000
12	6D 123678	0.1	1	0.006	0.003	0.000	1	0.002	0.001	0.000	1	0.007	0.003	0.000
13	6D 123789	0.1	1	0.006	0.003	0.000	1	0.002	0.001	0.000	1	0.007	0.003	0.000
14	6D Other	0	1	-0.002	-0.001	0.000	1	0.013	0.006	0.000		0.012	0.012	0.000
15	6D Total	0	1	0.017	0.008	0.000	1	0.019	0.009	0.000		0.033	0.033	0.000
16	7D 1234678	0.01	1	0.025	0.012	0.000	1	0.019	0.009	0.000	1	0.033	0.016	0.000
17	7D Other	0	1	0.048	0.024	0.000	1	0.048	0.024	0.000	1	0.104	0.052	0.000
18	7D Total	0	1	0.073	0.036	0.000	1	0.067	0.033	0.000	1	0.137	0.068	0.000
19	8D	0.001		0.146	0.146	0.000		0.122	0.122	0.000		0.281	0.281	0.000
20	4F 2378	0.1		0.004	0.004	0.000	1	0.002	0.001	0.000		0.007	0.007	0.001
21	4F Other	0	1	-0.002	-0.001	0.000		0.010	0.010	0.000	1	0.054	0.027	0.000
22	4F Total	0	1	0.002	0.001	0.000		0.013	0.013	0.000	1	0.061	0.030	0.000
23	5F 12378	0.05	1	0.002	0.001	0.000	1	0.001	0.000	0.000	1	0.002	0.001	0.000
24	5F 23478	0.5	1	0.002	0.001	0.000	1	0.001	0.000	0.000	1	0.002	0.001	0.000
25	5F Other	0		0.002	0.002	0.000	1	0.009	0.004	0.000		0.015	0.015	0.000
26	5F Total	0		0.006	0.006	0.000	1	0.010	0.005	0.000		0.019	0.019	0.000
27	6F 123478	0.1	1	0.004	0.002	0.000	1	0.001	0.001	0.000	1	0.002	0.001	0.000
28	6F 123678	0.1	1	0.021	0.010	0.001	1	0.001	0.001	0.000	1	0.002	0.001	0.000
29	6F 123789	0.1	1	0.004	0.002	0.000	1	0.001	0.001	0.000	1	0.005	0.002	0.000
30	6F 234678	0.1	1	0.004	0.002	0.000		0.002	0.002	0.000	1	0.002	0.001	0.000
31	6F Other	0		-0.029	-0.029	0.000	1	0.011	0.005	0.000	1	0.000	0.000	0.000
32	6F Total	0		0.004	0.004	0.000	1	0.017	0.008	0.000	1	0.012	0.006	0.000
33	7F 1234678	0.01	1	0.004	0.002	0.000		0.006	0.006	0.000		0.007	0.007	0.000
34	7F 1234789	0.01	1	0.006	0.003	0.000	1	0.002	0.001	0.000	1	0.007	0.003	0.000
35	7F Other	0	1	-0.006	-0.003	0.000	1	0.000	0.000	0.000	1	-0.002	-0.001	0.000
36	7F Total	0	1	0.004	0.002	0.000	1	0.009	0.004	0.000	1	0.012	0.006	0.000
37	8F	0.001	1	0.012	0.006	0.000	1	0.009	0.004	0.000		0.009	0.009	0.000
38	Total PCDD/PCDF			0.268	0.212			0.267	0.202			0.574	0.458	
39	TEQ		94.4	0.010		0.005	88.5	0.003		0.002	87.7	0.008		0.005