	B	C
1	**Source Description**	
2		
3	Phase II ID No.	2022
4	EPA ID No.	LAD008086506
5	Facility Name	PPG Industries, Inc.
6	Facility Location	
7	City	Lake Charles
8	State	LA
9	Unit ID Name/No.	Unit No. 3
10	Other Sister Facilities	None
11	Number of Sister Facilities	0
12	Combustor Class	HCl Production Furnace
13	Combustor Type	
14	Combustor Characteristics	John Zink side fired combustor capable of burning liquid hazardous waste, vent gases and auxiliary fuel. Also, designed to provide waste heat recovery as steam and acid recovery.
15	Capacity (MMBtu/hr)	69
16	Soot Blowing	None
17	APCS Detailed Acronym	WHB, WS
18	APCS General Class	WHB, LEWS
19	APCS Characteristics	Waste heat boiler, 2 stages of scrubber, primary (3 packed beds), secondary
20	Hazardous Wastes	Liq
21	Haz Waste Description	Light and heavy ends from chlorinated hydrocarbon production
22	Supplemental Fuel	Natural gas
23		
24	Stack Characteristics	
25	Diameter (ft)	
26	Height (ft)	
27	Gas Velocity (ft/sec)	
28	Gas Temperature (°F)	
29		
30	Permitting Status	Tier IA for all metals (metals stack gas measurements made for information purposes only), Tier III HCl/Cl2
31	HWC Burn Status (Date if Terminated)	

	B	C
1	**Cond Description**	
2		
3	**2022C1**	
4		
5	Report Name/Date	Trial Burn Report for Incinerator Unit 1 and 2 and Number 3 HAF Unit, October 2001
6	Report Prepare	ENSR Corporation
7	Testing Firm	ENSR International
8	Testing Dates	May 17-18, 2001
9	Cond Dates	May-01
10	Condition Descr	Trial burn, min comb temp
11	Content	POHC, PCDD/F, PM, HCl/Cl2
12		
13	**2022C2**	
14		
15	Report Name/Date	Trial Burn Report for Incinerator Unit 1 and 2 and Number 3 HAF Unit, October 2001
16	Report Prepare	ENSR Corporation
17	Testing Firm	ENSR International
18	Testing Dates	May 23, 2001
19	Cond Dates	May-01
20	Condition Descr	Trial burn, increased PCB feed rate
21	Content	POHC, PCDD/F, PM, HCl/Cl2
22		
23	**2022C3**	
24		
25	Report Name/Date	Trial Burn Report for Incinerator Unit 1 and 2 and Number 3 HAF Unit, October 2001
26	Report Prepare	ENSR Corporation
27	Testing Firm	ENSR International
28	Testing Dates	May 22, 2001
29	Cond Dates	May-01
30	Condition Descr	Normal comb temp
31	Content	POHC, PM, HCl/Cl2, PCDD/F, metals
32		
33	**2022C4**	
34		
35	Report Name/Date	Risk Burn Report for Incinerator Unit 1 and 2 and Number 3 HAF Unit, October 2001
36	Report Prepare	ENSR Corporation
37	Testing Firm	ENSR International
38	Testing Dates	May 20-21, 2001
39	Cond Dates	May-01
40	Condition Descr	Risk burn, normal op cond, PCB containing material
41	Content	PCDD/F, metals

	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	**2022C1**	**Trial Burn**				R1		R2		R3		Cond Avg
7												
8	PM	E1	gr/dscf	y		0.0085		0.0084		0.0095		0.0088
9	CO (RA)	E1	ppmv	y		0.48		1.52		0.94		1.0
10	CO (MHRA)	E1	ppmv	y		3.43		163.51		3.12		56.7
11	NOx	E2	ppmv	y		49		49.4		51.5		50.0
12												
13	HCl		ppmv	n		6.41		9.49		6.65		
14	Cl2		ppmv	n		10.16		7.44		10.55		
15												
16		had waste feedcutoff during run 2 due to high CO										
17												
18	POHC DRE	MCB										
19	POHC Feedrate		lb/hr			311		312		306		
20	Emissions Rate	E2	lb/hr			3.26E-04		8.20E-05		1.25E-04		
21	DRE	E2	%			99.99994		99.99997		99.99996		
22												
23	POHC DRE	PERC										
24	POHC Feedrate		lb/hr			475		473		257		
25	Emissions Rate	E2	lb/hr			8.98E-05		7.71E-05		5.55E-05		
26	DRE	E2	%		nd	99.99998		99.99998	nd	99.99998		
27												
28	Sampling Train	PM, HCl/Cl2	E1									
29	Stack Gas Flowrate		dscfm			12898		12892		12437		12742
30	O2		%			9.15		9.3		9.33		9.3
31	Moisture		%			19.2		19.7		19.7		19.50
32	Temperature		°F			139		140		140		140.00
33												
34	Sampling Train	DRE, NOx	E2									
35	Stack Gas Flowrate		dscfm			14062		13264		13230		
36	O2		%									
37	Moisture		%									
38	Temperature		°F									
39												
40	Sampling Train	PCDD/Fs	E3									
41	Stack Gas Flowrate		dscfm			14062		13264		13230		
42	O2		%			9.2		9.3		9.2		
43	Moisture		%			18.3		19.2		20.2		
44	Temperature		°F									
45												
46	HCl	E1	ppmv	y		7.6		11.4		8.0		9.0
47	Cl2	E1	ppmv	y		12.0		8.9		12.7		11.2
48	Total Chlorine	E1	ppmv	y		31.58		29.16		33.29		31.3
49												
50	**2022C2**	**Trial Burn**				R1		R2		R3		Cond Avg
51												
52	PM	E1	gr/dscf	y		0.0064		0.0071		0.0058		0.0064
53	CO (RA)	E1	ppmv	y		1.12		1.51		1.21		1.3
54	CO (MHRA)	E1	ppmv	y		3.91		4.13		3.42		3.8
55	NOx	E2	ppmv	y		42.4		43.8		45.4		43.9
56												
57	HCl		ppmv	n		4.45		3.49		3.05		
58	Cl2		ppmv	n		8.91		14.05		8.1		
59												
60	POHC DRE	MCB										
61	POHC Feedrate		lb/hr			309		309		309		
62	Emissions Rate	E2	lb/hr			7.61E-05		7.60E-05		6.09E-05		
63	DRE	E2	%			99.99998		99.99998		99.99998		
64												
65	POHC DRE	PERC										
66	POHC Feedrate		lb/hr			772		821		745		
67	Emissions Rate	E2	lb/hr			4.68E-05		4.35E-05		4.44E-05		
68	DRE	E2	%			99.99999		99.99999		99.99999		
69												
70	Sampling Train	PM, HCl/Cl2	E1									
71	Stack Gas Flowrate		dscfm			14162		14294		14171		14209

	B	C	D	E	F	G	H	I	J	K	L	M
72	O2		%			9.42		9.43		9.53		9.5
73	Moisture		%			17.3		17.7		18.7		17.90
74	Temperature		°F			135		137		138		137.00
75												
76	Sampling Train	DRE, NOx	E2									
77	Stack Gas Flowrate		dscfm			14033		14455		14045		
78	O2		%									
79	Moisture		%									
80	Temperature		°F									
81												
82	Sampling Train	PCDD/Fs	E3									
83	Stack Gas Flowrate		dscfm			14033		14455		14045		
84	O2		%			9.4		9.4		9.5		
85	Moisture		%			18.2		18		18.6		
86	Temperature		°F									
87												
88												
89	HCl	E1	ppmv	y		5.4		4.2		3.7		4.4
90	Cl2	E1	ppmv	y		10.8		17.0		9.9		12.6
91	Total Chlorine	E1	ppmv	y		26.92		38.22		23.50		29.5
92												
93	**2022C3**	**Trial Burn**				R1		R2		R3		Cond Avg
94												
95	PM	E1	gr/dscf	y		0.0075		0.0076		0.0085		0.0079
96	CO (RA)	E1	ppmv	y		1.09		1.92		1.36		1.46
97	CO (MHRA)	E1	ppmv	y		3.75		4.75		3.66		4.05
98	NOx	E3	ppmv	y		51.1		51.2		51.1		51.13
99												
100	HCl		ppmv	n		33.44		4.53		3.9		
101	Cl2		ppmv	n		14		17.14		17.69		16
102												
103	POHC DRE	MCB										
104	POHC Feedrate		lb/hr			308		309		307		
105	Emissions Rate	E3	lb/hr			2.65E-04	nd	9.77E-05		1.69E-04		
106	DRE	E3	%			99.99991	nd	99.99997		99.99994		
107												
108	POHC DRE	PERC										
109	POHC Feedrate		lb/hr			582		595		627		
110	Emissions Rate	E3	lb/hr			3.99E-05		4.59E-05		4.51E-05		
111	DRE	E3	%			99.99999		99.99999		99.99999		
112												
113	Arsenic		ug/dscm	n	nd	0.18	nd	0.18	nd	0.18		
114	Beryllium		ug/dscm	n	nd	0.04	nd	0.04	nd	0.04		
115	Cadmium		ug/dscm	n		0.14		0.05		0.14		
116	Chromium		ug/dscm	n		4.55		4.13		3.7		
117	Mercury		ug/dscm	n	nd	0.37		0.03	nd	0.42		
118	Antimony		ug/dscm	n	nd	0.18	nd	0.18	nd	0.18		
119	Barium		ug/dscm	n		0.61		0.4		0.48		
120	Lead		ug/dscm	n		0.36		3.8		0.41		
121	Silver		ug/dscm	n		0.99		0.02		0.26		
122	Thallium		ug/dscm	n	nd	0.22	nd	0.22	nd	0.22		
123	Nickel		ug/dscm	n		24.86		20.14		20.17		
124	Selenium		ug/dscm	n	nd	0.44	nd	0.44	nd	0.44		
125												
126												
127	Sampling Train	PM, HCl/Cl2	E1									
128	Stack Gas Flowrate		dscfm			13630		13565		13551		13582
129	O2		%			8.35		8.38		8.39		8.4
130	Moisture		%			19.6		19.6		20.1		19.80
131	Temperature		°F			141		141		142		141.00
132												
133	Sampling Train	Metals	E2									
134	Stack Gas Flowrate		dscfm			13991		13882		13684		13852
135	O2		%			8.35		8.38		8.39		8.37
136	Moisture		%			20.60		20.6		21.2		20.8
137	Temperature		°F			142		143		143		143
138												
139	Sampling Train	DRE, NOx, TH	E3									
140	Stack Gas Flowrate		dscfm			13751		13552		13400		
141	O2		%									
142	Moisture		%									

	B	C	D	E	F	G	H	I	J	K	L	M
143	Temperature		°F									
144												
145	Sampling Train	PCDD/Fs	E4									
146	Stack Gas Flowrate		dscfm			13751		13552		13400		
147	O2		%			8.4		8.4		8.4		
148	Moisture		%			18.8		19.4		19.9		
149	Temperature		°F									
150												
151	HCl	E1	ppmv	y		37.0		5.0		4.3		15.45
152	Cl2	E1	ppmv	y		15.5		19.0		19.6		18.05
153	Total Chlorine	E1	ppmv	y		68.00		43.05		43.61		51.55
154												
155	Arsenic	E2	ug/dscm	y		0.20		0.20		0.20		0.20
156	Beryllium	E2	ug/dscm	y	nd	0.04	nd	0.04	nd	0.04	100	0.04
157	Cadmium	E2	ug/dscm	y	nd	0.15	nd	0.06	nd	0.16	100	0.12
158	Chromium	E2	ug/dscm	y		5.04		4.58		4.11		4.58
159	Mercury	E2	ug/dscm	y		0.41		0.03		0.47		0.30
160	Antimony	E2	ug/dscm	y	nd	0.20	nd	0.20	nd	0.20	100	0.20
161	Barium	E2	ug/dscm	y		0.68		0.44		0.53		0.55
162	Lead	E2	ug/dscm	y		0.40	nd	4.22	nd	0.46	92.1	1.69
163	Silver	E2	ug/dscm	y	nd	1.10	nd	0.02	nd	0.29	100	0.47
164	Thallium	E2	ug/dscm	y		0.24		0.24		0.24		0.24
165	Nickel	E2	ug/dscm	y	nd	27.51	nd	22.34	nd	22.39	100	24.08
166	Selenium	E2	ug/dscm	y		0.49	nd	0.49	nd	0.49		0.49
167	SVM	E2	ug/dscm	y	28	0.55	100	4.27	100	0.61	92.7	1.81
168	LVM	E2	ug/dscm	y	1	5.28	0.92	4.83	1.02	4.35	1	4.82
169												
170	**2022C4**	**Risk burn**				R1		R2		R3		Cond Avg
171												
172	CO (RA)	E1	ppmv	y		0.75		1.38		0.54		0.89
173	CO (MHRA)	E1	ppmv	y		2.3		3.67		3.93		3.30
174	NOx	E3	ppmv	y		42.7		42		41.4		42.03
175												
176	Arsenic		ug/dscm	n		0.68		0.59		0.25		
177	Beryllium		ug/dscm	n		0.05		0.05		0.05		
178	Cadmium		ug/dscm	n		0.78		0.63		0.25		
179	Chromium		ug/dscm	n		3.09		3.37		1.8		
180	Mercury		ug/dscm	n		0.08		0.13		0.41		
181	Antimony		ug/dscm	n		0.21		0.27		0.2		
182	Barium		ug/dscm	n		1.94		1.47		1.02		
183	Lead		ug/dscm	n		1.42		1.52		0.5		
184	Silver		ug/dscm	n		0.3		0.08		0.16		
185	Thallium		ug/dscm	n		0.26		0.24		0.24		
186	Nickel		ug/dscm	n		19.25		118.46		15.02		
187	Selenium		ug/dscm	n		0.63		0.49		0.49		
188	Chromium (Hex)		ug/dscm	n								
189												
190	Sampling Train	Metals	E1									
191	Stack Gas Flowrate		dscfm			12055		12899		12789		12581.00
192	O2		%			7		6.5		6.4		6.63
193	Moisture		%			18.3		18.8		17.8		18.30
194	Temperature		°F			137		138		137		137.00
195												
196	Sampling Train	Cr+6	E2									
197	Stack Gas Flowrate		dscfm			12667		12586		13501		12918.00
198	O2		%			8.54		8.5		8.43		8.49
199	Moisture		%			19.3		17.1		17.5		17.90
200	Temperature		°F			135		136		136		136.00
201												
202	Sampling Train	PCDD/Fs, NO	E3									
203	Stack Gas Flowrate		dscfm			12979		13115		13017		
204	O2		%			8.5		8.5		8.4		
205	Moisture		%			17		17		17.3		
206	Temperature		°F									
207												
208	Arsenic	E1	ug/dscm	y		0.68		0.57		0.24		0.50
209	Beryllium	E1	ug/dscm	y	nd	0.05	nd	0.05	nd	0.05	100	0.05
210	Cadmium	E1	ug/dscm	y		0.78		0.61		0.24		0.54
211	Chromium	E1	ug/dscm	y		3.09		3.25		1.73		2.69
212	Mercury	E1	ug/dscm	y		0.08		0.13	nd	0.39	65.7	0.20
213	Antimony	E1	ug/dscm	y	nd	0.21	nd	0.26	nd	0.19	100	0.22

	B	C	D	E	F	G	H	I	J	K	L	M
214	Barium	E1	ug/dscm	y		1.94		1.42		0.98		1.45
215	Lead	E1	ug/dscm	y		1.42		1.47		0.48		1.12
216	Silver	E1	ug/dscm	y		0.30		0.08	nd	0.15	28.9	0.18
217	Thallium	E1	ug/dscm	y	nd	0.26	nd	0.23	nd	0.23	100	0.24
218	Nickel	E1	ug/dscm	y		19.25		114.38		14.40		49.34
219	Selenium	E1	ug/dscm	y		0.63	nd	0.47	nd	0.47	59.9	0.52
220												
221	SVM	E1	ug/dscm			2.20		2.08		0.72	0	1.67
222	LVM	E1	ug/dscm		1.31	3.82	1.25	3.87	2.38	2.01	1.51	3.24

	B	C	D	E	F	G	H	I	J	K	L	M	N
1	**Feedrate Calculations**												
2													
3													
4	**2022C1**	**Trial burn**			Cond Avg		Cond Avg		Cond Avg		Cond Avg		Cond Avg
5													
6	Feedstream Number				F1		F2		F3		F4		F5
7	Feed Class				Liq HW		Spike		NG		Misc. Fuel		Total
8	Feed Class 2				HW		Spike		MF				Total
9	Feedstream Description				Liq waste		Spike		Nat Gas		Vent Gas		Total
10	Feed Rate		gpm		8.35								
11	Feed Rate		scfh						9900		70600		
12	Viscosity		cps		5.00								
13	Heating Value		Btu/lb		4550.0								
14	Heating Value		Btu/cf		60.0				1000				
15	Density		lb/c ?										
16	Density		lb/c ?										
17	MCB		lb/hr				300						
18	Ash		% wt		0.03								
19	Chlorine		lb/hr		8100								
20													
21	Stack Gas Flowrate		dscfm		12742								
22	Oxygen		%		9.3								
23													
24	Thermal Feedrate		MMBtu/hr		19.0				9.9				28.9
25	Estimated Firing Rate		MMBtu/hr										47.5
26													
27	*Feedrate MTEC Calculations*												
28	Ash		mg/dscm		31.37								31.37
29	Chlorine		ug/dscm		2.03E+08								2.03E+08
30													
31	**2022C2**	**Trial burn**			Cond Avg		Cond Avg		Cond Avg		Cond Avg		Cond Avg
32													
33	Feedstream Number				F1		F2		F3		F4		F5
34	Feed Class				Liq HW		Spike		NG		Misc. Fuel		Total
35	Feed Class 2				HW		Spike		MF				Total
36	Feedstream Description				Liq waste		Spike		Nat Gas		Vent Gas		Total
37	Feed Rate		gpm		10.9								
38	Feed Rate		scfh						766.7		37000		
39	Viscosity		cps		3.92								
40	Heating Value		Btu/lb		9260.0								
41	Heating Value		Btu/cf		85.0				1000				
42	Density		lb/c ?										
43	MCB		lb/hr				300						
44	Ash		% wt		0.02								
45	Chlorine		lb/hr		5800								
46													
47	Stack Gas Flowrate		dscfm		14209								
48	Oxygen		%		9.5								
49													
50	Thermal Feedrate		MMBtu/hr		50.6				0.8				51.3
51	Estimated Firing Rate		MMBtu/hr										52.1
52													
53	*Feedrate MTEC Calculations*												
54	Ash		mg/dscm		24.93								24.9
55	Chlorine		ug/dscm		1.32E+08								1.32E+08
56													
57	**2022C3**	**Trial burn**			Cond Avg		Cond Avg		Cond Avg		Cond Avg		Cond Avg
58													
59	Feedstream Number				F1		F2		F3		F4		F5
60	Feed Class				Liq HW		Spike		NG		Misc. Fuel		Total

	B	C	D	E	F	G	H	I	J	K	L	M	N
61	Feed Class 2				HW		Spike		MF				Total
62	Feedstream Description				Liq waste		Spike		Nat Gas		Vent Gas		Total
63	Feed Rate		gpm		8.3								
64	Feed Rate		scfh						17314.3		68000		
65	Viscosity		cps		4.1								
66	Heating Value		Btu/lb		4056.7								
67	Heating Value		Btu/cf						1000.0				
68	Density		lb/c ?		77.0								
69	MCB		lb/hr				300						
70	Ash		% wt		0.03								
71	Chlorine		lb/hr		8400.0								
72	Antimony		mg/kg	nd	0.19								
73	Arsenic		mg/kg		0.30								
74	Barium		mg/kg		0.06								
75	Beryllium		mg/kg	nd	0.03								
76	Cadmium		mg/kg	nd	0.09								
77	Chromium		mg/kg		0.43								
78	Lead		mg/kg		0.44								
79	Mercury		mg/kg		1.00								
80	Nickel		mg/kg		1.28								
81	Selenium		mg/kg	nd	0.34								
82	Silver		mg/kg	nd	0.08								
83	Thallium		mg/kg	nd	1.00								
84	Chromium (Hex)		mg/kg	nd	0.20								
85													
86	Stack Gas Flowrate		dscfm		13852								
87	Oxygen		%		8.37								
88													
89	Thermal Feedrate		MMBtu/hr		16.89				17.31				34.2
90	Estimated Firing Rate		MMBtu/hr										55.5
91													
92													
93	*Feedrate MTEC Calculations*												
94	Ash		mg/dscm		29.40								29.40
95	Chlorine		ug/dscm		1.80E+08								1.80E+08
96	Antimony		ug/dscm	100	0.09							100	0.09
97	Arsenic		ug/dscm		0.14								0.14
98	Barium		ug/dscm		0.03								0.03
99	Beryllium		ug/dscm	100	0.01							100	0.01
100	Cadmium		ug/dscm	100	0.04							100	0.04
101	Chromium		ug/dscm		0.19								0.19
102	Lead		ug/dscm		0.20								0.20
103	Mercury		ug/dscm		0.45								0.45
104	Nickel		ug/dscm		0.58								0.58
105	Selenium		ug/dscm	100	0.15							100	0.15
106	Silver		ug/dscm	100	0.04							100	0.04
107	Thallium		ug/dscm	100	0.45							100	0.45
108	Chromium (Hex)		ug/dscm	100	0.09							100	0.09
109	SVM		ug/dscm		0.2								0.24
110	LVM		ug/dscm		0.34								0.34
111													
112													
113	**2022C4**	**Risk burn**			Cond Avg		Cond Avg		Cond Avg		Cond Avg		
114													
115	Feedstream Number				F1		F2		F3		F4		
116	Feed Class				Liq HW		NG		Misc. Fuel		Total		
117	Feed Class 2				HW		MF				Total		
118	Feedstream Description				Liq waste		Nat Gas		Vent Gas		Total		
119	Feed Rate		gpm		5.2								
120	Feed Rate		scfh				15000		56000				

	B	C	D	E	F	G	H	I	J	K	L	M	N
121	Heating Value		Btu/cf				1000						
122	Thermal Feedrate		MMBtu/hr				15				15		
123	Chlorine		lb/hr		3500.0								
124													
125	Stack Gas Flowrate		dscfm		12581.00								
126	Oxygen		%		6.63								
127													
128	Chlorine		ug/dscm		7.25E+07						7.25E+07		

	B	C	D	E	F
1	**Process Information**				
2			Run1	Run 2	Run3
3	**2022C1**	Trial burn			
4					
5	Combustion Chamber Temp.	^{o}F	2126	2121	2125
6	Air Flow	scfh	831214	808168	807589
7	Secondary Scrubber Flow	gpm	288.43	293.45	291.75
8	Secondary Scrubber pH	pH	8.89	8.88	8.9
9	Secondary Scrubber Blowdown	gpm	60.74	73.3	71.27
10					
11	**2022C2**	Trial burn			
12					
13	Combustion Chamber Temp.	^{o}F	23332.0	2344	2324
14	Air Flow	scfh	895038.0	898531	900618
15	Secondary Scrubber Flow	gpm	286.89	283.12	282.68
16	Secondary Scrubber pH	pH	8.89	8.9	8.91
17	Secondary Scrubber Blowdown	gpm	73.15	73.5	70.74
18					
19	**2022C3**	Trial burn			
20					
21	Combustion Chamber Temp.	^{o}F	2288	2289	2290
22	Air Flow	scfh	841346	841535	840900
23	Secondary Scrubber Flow	gpm	284.36	281.01	277.24
24	Secondary Scrubber pH	pH	8.9	8.9	8.91
25	Secondary Scrubber Blowdown	gpm	66.29	67.92	66.84
26					
27	**2022C4**	Risk burn			
28					
29	Combustion Chamber Temp.	^{o}F	2320	2321	2312
30	Air Flow	scfh	800479	798406	801755
31	Secondary Scrubber Flow	gpm	275.4	276.57	271.39
32	Secondary Scrubber pH	pH	8.9	8.9	8.89
33	Secondary Scrubber Blowdown	gpm	48.75	52.59	45.97

	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:		PPG Industries, Lake Charles, LA															
4	Condition ID:		2022C1															
5	Condition/Test Date:		Trial burn, min comb temp															
6																		
7			I-TEF				Run 1					Run 2					Run 3	
8			Wght Fact		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ
9					Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND
10	Detected in sample volume (pg)																	
11		2,3,7,8-TCDD	1	nd	3.8	3.8	1.9	1.9	nd	4.1	4.1	2.1	2.1	nd	4.2	4.2	2.1	2.1
12		Total TCDD	0	nd	3.8	0.0	1.9	0.0	nd	4	0.0	2.1	0.0	nd	4.2	0.0	2.1	0.0
13		1,2,3,7,8-PCDD	0.5	nd	5.8	2.9	2.9	1.5	nd	6.8	3.4	3.4	1.7	nd	8.6	4.3	4.3	2.2
14		Total PCDD	0	nd	5.8	0.0	2.9	0.0	nd	6.8	0.0	3.4	0.0	nd	30.5	0.0	15.3	0.0
15		1,2,3,4,7,8-HxCDD	0.1	nd	12.1	1.2	6.1	0.6	nd	10.6	1.1	5.3	0.5	nd	10.8	1.1	5.4	0.5
16		1,2,3,6,7,8-HxCDD	0.1	nd	13.1	1.3	6.6	0.7	nd	11.5	1.2	5.8	0.6	nd	11.7	1.2	5.9	0.6
17		1,2,3,7,8,9-HxCDD	0.1	nd	11.8	1.2	5.9	0.6	nd	10.4	1.0	5.2	0.5	nd	575.8	57.6	287.9	28.8
18		Total HxCDD	0	nd	12.3	0.0	6.2	0.0	nd	10.8	0.0	5.4	0.0	nd	11.0	0.0	5.5	0.0
19		1,2,3,4,6,7,8-HpCDD	0.01		36.9	0.4	36.9	0.4		32.9	0.3	32.9	0.3		32.4	0.3	32.4	0.3
20		Total HpCDD	0		63.3	0.0	63.3	0.0		46.1	0.0	46.1	0.0		51.8	0.0	51.8	0.0
21		OCDD	0.001		202.0	0.2	202.0	0.2		222	0.2	222.0	0.2		167.0	0.2	167.0	0.2
22		2,3,7,8-TCDF	0.1		71.0	7.1	71.0	7.1		118	11.8	118.0	11.8		165.0	16.5	165.0	16.5
23		Total TCDF	0		393.0	0.0	393.0	0.0		568	0.0	568.0	0.0		738.0	0.0	738.0	0.0
24		1,2,3,7,8-PCDF	0.05		49.0	2.5	49.0	2.5		85	4.3	85.0	4.3		106.0	5.3	106.0	5.3
25		2,3,4,7,8-PCDF	0.5		27.0	13.5	27.0	13.5		48	24.0	48.0	24.0		60.0	30.0	60.0	30.0
26		Total PCDF	0		330.0	0.0	330.0	0.0		566	0.0	566.0	0.0		691.0	0.0	691.0	0.0
27		1,2,3,4,7,8-HxCDF	0.1		250.0	25.0	250.0	25.0		607	60.7	607.0	60.7		636.0	63.6	636.0	63.6
28		1,2,3,6,7,8-HxCDF	0.1		76.0	7.6	76.0	7.6		145	14.5	145.0	14.5		142.0	14.2	142.0	14.2
29		2,3,4,6,7,8-HxCDF	0.1		32.0	3.2	32.0	3.2		53	5.3	53.0	5.3		61.0	6.1	61.0	6.1
30		1,2,3,7,8,9-HxCDF	0.1		34.0	3.4	34.0	3.4		76	7.6	76.0	7.6		76.0	7.6	76.0	7.6
31		Total HxCDF	0		749.0	0.0	749.0	0.0		1580	0.0	1580.0	0.0		1602.0	0.0	1602.0	0.0
32		1,2,3,4,6,7,8-HpCDF	0.01		949.0	9.5	949.0	9.5		2480	24.8	2480.0	24.8		1812.0	18.1	1812.0	18.1
33		1,2,3,4,7,8,9-HpCDF	0.01		248.0	2.5	248.0	2.5		816	8.2	816.0	8.2		555.0	5.6	555.0	5.6
34		Total HpCDF	0		1800.0	0.0	1800.0	0.0		5580	0.0	5580.0	0.0		3936.0	0.0	3936.0	0.0
35		OCDF	0.001		6940.0	6.9	6940.0	6.9		24770	24.8	24770.0	24.8		14480.0	14.5	14480.0	14.5
36																		
37		Gas sample volume (dscf)				123.03	123.03	123.03			116.37	116.37	116.37			113.52	113.52	113.52
38		O2 (%)				9.20	9.20	9.20			9.3	9.3	9.3			9.15	9.15	9.15
39																		
40		PCDD/PCDF (pg in sample)				92.1310	10488.3	86.9310			197.1810	33343.0	191.8060			250.2710	21688.7	216.1060
41		PCDD/PCDF (ng/dscm @ 7% O2)		11.3		0.0314	3.57	0.0296	5.5		0.0716	12.12	0.0697	27.3		0.0920	7.98	0.0795
42																		
43		TEQ Cond Avg	0.060															
44		Total Cond Avg	7.89															

	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:	PPG Industries, Lake Charles, LA															
4		Condition ID:	2022C2															
5		Condition/Test Date:	Trial burn, increased PCB feed rate															
6																		
7			I-TEF				Run 1						Run 2				Run 3			
8			Wght Fact		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ
9					Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND
10		Detected in sample volume (pg)																
11		2,3,7,8-TCDD	1	nd	4.7	4.7	2.4	2.4	nd	3.7	3.7	1.9	1.9	nd	3	2.9	1.5	1.5
12		Total TCDD	0	nd	4.7	0.0	2.4	0.0	nd	4	0.0	1.9	0.0	nd	3	0.0	1.5	0.0
13		1,2,3,7,8-PCDD	0.5	nd	7.5	3.8	3.8	1.9	nd	5.8	2.9	2.9	1.5	nd	5	2.5	2.5	1.3
14		Total PCDD	0	nd	7.5	0.0	3.8	0.0	nd	5.8	0.0	2.9	0.0	nd	5	0.0	2.5	0.0
15		1,2,3,4,7,8-HxCDD	0.1		8.7	0.9	8.7	0.9	nd	11.5	1.2	5.8	0.6	nd	10	1.0	5.1	0.5
16		1,2,3,6,7,8-HxCDD	0.1		12.0	1.2	12.0	1.2	nd	12.5	1.3	6.3	0.6	nd	11	1.1	5.5	0.6
17		1,2,3,7,8,9-HxCDD	0.1		7.6	0.8	7.6	0.8	nd	11.3	1.1	5.7	0.6	nd	10	1.0	5.0	0.5
18		Total HxCDD	0		72.8	0.0	72.8	0.0	nd	11.7	0.0	5.9	0.0		15	0.0	15.4	0.0
19		1,2,3,4,6,7,8-HpCDD	0.01		204.6	2.0	204.6	2.0		79.1	0.8	79.1	0.8		80	0.8	79.7	0.8
20		Total HpCDD	0		339.0	0.0	339.0	0.0		128.1	0.0	128.1	0.0		127	0.0	127.3	0.0
21		OCDD	0.001		1232.0	1.2	1232.0	1.2		744	0.7	744.0	0.7		659	0.7	659.0	0.7
22		2,3,7,8-TCDF	0.1		56.0	5.6	56.0	5.6		42	4.2	42.0	4.2		59	5.9	59.0	5.9
23		Total TCDF	0		346.0	0.0	346.0	0.0		235	0.0	235.0	0.0		304	0.0	304.0	0.0
24		1,2,3,7,8-PCDF	0.05		77.0	3.9	77.0	3.9		53	2.7	53.0	2.7		68	3.4	68.0	3.4
25		2,3,4,7,8-PCDF	0.5		46.0	23.0	46.0	23.0		32	16.0	32.0	16.0		41	20.5	41.0	20.5
26		Total PCDF	0		625.0	0.0	625.0	0.0		402	0.0	402.0	0.0		485	0.0	485.0	0.0
27		1,2,3,4,7,8-HxCDF	0.1		594.0	59.4	594.0	59.4		337	33.7	337.0	33.7		446	44.6	446.0	44.6
28		1,2,3,6,7,8-HxCDF	0.1		326.0	32.6	326.0	32.6		130	13.0	130.0	13.0		167	16.7	167.0	16.7
29		2,3,4,6,7,8-HxCDF	0.1		129.0	12.9	129.0	12.9		54	5.4	54.0	5.4		71	7.1	71.0	7.1
30		1,2,3,7,8,9-HxCDF	0.1		110.0	11.0	110.0	11.0		48	4.8	48.0	4.8		61	6.1	61.0	6.1
31		Total HxCDF	0		2607.0	0.0	2607.0	0.0		1193	0.0	1193.0	0.0		1507	0.0	1507.0	0.0
32		1,2,3,4,6,7,8-HpCDF	0.01		4889.0	48.9	4889.0	48.9		1753	17.5	1753.0	17.5		2477	24.8	2477.0	24.8
33		1,2,3,4,7,8,9-HpCDF	0.01		1349.0	13.5	1349.0	13.5		476	4.8	476.0	4.8		550	5.5	550.0	5.5
34		Total HpCDF	0		9900.0	0.0	9900.0	0.0		3361	0.0	3361.0	0.0		4314	0.0	4314.0	0.0
35		OCDF	0.001		37100.0	37.1	37100.0	37.1		21360	21.4	21360.0	21.4		24300	24.3	24300.0	24.3
36																		
37		Gas sample volume (dscf)				123.59	123.59	123.59			126.15	126.15	126.15			125.36	125.36	125.36
38		O2 (%)				9.42	9.42	9.42			9.4	9.4	9.4			9.52	9.52	9.52
39																		
40		PCDD/PCDF (pg in sample)				262.3880	52227.9	258.1630			135.0650	27433.7	130.0000			168.8260	31715.7	164.5760
41		PCDD/PCDF (ng/dscm @ 7% O2)		3.2		0.0907	18.05	0.0892	7.5		0.0458	9.30	0.0441	5.0		0.0580	10.90	0.0566
42																		
43		TEQ Cond Avg	0.063															
44		Total Cond Avg	12.75															

	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:		PPG Industries, Lake Charles, LA															
4	Condition ID:		2022C3															
5	Condition/Test Date:		Normal comb temp															
6																		
7			I-TEF				Run 1					Run 2					Run 3	
8			Wght Fact		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ
9					Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND
10	Detected in sample volume (pg)																	
11		2,3,7,8-TCDD	1	nd	4.2	4.2	2.1	2.1	nd	2.4	2.4	1.2	1.2	nd	2	2.3	1.2	1.2
12		Total TCDD	0	nd	4.2	0.0	2.1	0.0		3	0.0	2.9	0.0	nd	2	0.0	1.2	0.0
13		1,2,3,7,8-PCDD	0.5	nd	6.4	3.2	3.2	1.6	nd	6.4	3.2	3.2	1.6	nd	5	2.4	2.4	1.2
14		Total PCDD	0		4.4	0.0	4.4	0.0	nd	6.45	0.0	3.2	0.0	nd	6	0.0	2.9	0.0
15		1,2,3,4,7,8-HxCDD	0.1	nd	10.1	1.0	5.1	0.5	nd	7.2	0.7	3.6	0.4	nd	7	0.7	3.7	0.4
16		1,2,3,6,7,8-HxCDD	0.1	nd	11.0	1.1	5.5	0.6	nd	7.2	0.7	3.6	0.4	nd	7	0.7	3.7	0.4
17		1,2,3,7,8,9-HxCDD	0.1	nd	9.9	1.0	5.0	0.5	nd	6.7	0.7	3.4	0.3	nd	7	0.7	3.5	0.3
18		Total HxCDD	0	nd	10.3	0.0	5.2	0.0		2.95	0.0	3.0	0.0	nd	7	0.0	3.6	0.0
19		1,2,3,4,6,7,8-HpCDD	0.01		45.4	0.5	45.4	0.5		42.5	0.4	42.5	0.4		61	0.6	61.0	0.6
20		Total HpCDD	0		71.3	0.0	71.3	0.0		67.5	0.0	67.5	0.0		96	0.0	96.1	0.0
21		OCDD	0.001		375.0	0.4	375.0	0.4		398	0.4	398.0	0.4		584	0.6	584.0	0.6
22		2,3,7,8-TCDF	0.1		65.0	6.5	65.0	6.5		77.3	7.7	77.3	7.7		75	7.5	75.3	7.5
23		Total TCDF	0		295.0	0.0	295.0	0.0		397	0.0	397.0	0.0		381	0.0	381.0	0.0
24		1,2,3,7,8-PCDF	0.05		37.2	1.9	37.2	1.9		46.7	2.3	46.7	2.3		53	2.6	52.8	2.6
25		2,3,4,7,8-PCDF	0.5		19.8	9.9	19.8	9.9		28	14.0	28.0	14.0		35	17.7	35.3	17.7
26		Total PCDF	0		253.0	0.0	253.0	0.0		316	0.0	316.0	0.0		369	0.0	369.0	0.0
27		1,2,3,4,7,8-HxCDF	0.1		231.0	23.1	231.0	23.1		264	26.4	264.0	26.4		346	34.6	346.0	34.6
28		1,2,3,6,7,8-HxCDF	0.1		70.5	7.1	70.5	7.1		74.4	7.4	74.4	7.4		102	10.2	102.0	10.2
29		2,3,4,6,7,8-HxCDF	0.1		29.4	2.9	29.4	2.9		27.4	2.7	27.4	2.7		46	4.6	45.8	4.6
30		1,2,3,7,8,9-HxCDF	0.1		25.6	2.6	25.6	2.6		30.5	3.1	30.5	3.1		45	4.5	45.3	4.5
31		Total HxCDF	0		668.0	0.0	668.0	0.0		760	0.0	760.0	0.0		1063	0.0	1063.0	0.0
32		1,2,3,4,6,7,8-HpCDF	0.01		1117.0	11.2	1117.0	11.2		1046	10.5	1046.0	10.5		1716	17.2	1716.0	17.2
33		1,2,3,4,7,8,9-HpCDF	0.01		254.0	2.5	254.0	2.5		298	3.0	298.0	3.0		432	4.3	432.0	4.3
34		Total HpCDF	0		1879.0	0.0	1879.0	0.0		1991	0.0	1991.0	0.0		3130	0.0	3130.0	0.0
35		OCDF	0.001		13060.0	13.1	13060.0	13.1		13970	14.0	13970.0	14.0		21240	21.2	21240.0	21.2
36																		
37		Gas sample volume (dscf)				120.86	120.86	120.86			120.68	120.68	120.68			120.58	120.58	120.58
38		O2 (%)				8.35	8.35	8.35			8.4	8.4	8.4			8.39	8.39	8.39
39																		
40		PCDD/PCDF (pg in sample)				92.0090	16612.9	86.7590			99.6380	17908.6	95.7830			132.5	26870.7	129.1
41		PCDD/PCDF (ng/dscm @ 7% O2)		11.4		0.0298	5.38	0.0281	7.7		0.0324	5.82	0.0311	5.1		0.0431	8.74	0.0420
42																		
43		TEQ Cond Avg	0.034															
44		Total Cond Avg	6.65															

	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:	PPG Industries, Lake Charles, LA																
4	Condition ID:	2022C4																
5	Condition/Test Date:	Risk burn, normal operating condition in feeding non PCB containing materials.																
6																		
7			I-TEF				Run 1					Run 2					Run 3		
8			Wght Fact		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ
9					Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND
10	Detected in sample volume (pg)																	
11		2,3,7,8-TCDD	1	nd	2.8	2.8	1.4	1.4	nd	1.6	1.6	0.8	0.8	nd	2	2.4	1.2	1.2
12		Total TCDD	0	nd	2.8	0.0	1.4	0.0		2	0.0	1.6	0.0		1	0.0	1.3	0.0
13		1,2,3,7,8-PCDD	0.5	nd	5.9	3.0	3.0	1.5	nd	7	3.5	3.5	1.8	nd	7	3.3	3.3	1.7
14		Total PCDD	0	nd	5.9	0.0	3.0	0.0	nd	9	0.0	4.5	0.0		4	0.0	4.2	0.0
15		1,2,3,4,7,8-HxCDD	0.1	nd	10.2	1.0	5.1	0.5	nd	9.4	0.9	4.7	0.5	nd	14	1.4	6.9	0.7
16		1,2,3,6,7,8-HxCDD	0.1	nd	10.2	1.0	5.1	0.5	nd	9.4	0.9	4.7	0.5	nd	14	1.4	6.9	0.7
17		1,2,3,7,8,9-HxCDD	0.1	nd	9.5	1.0	4.8	0.5	nd	8.8	0.9	4.4	0.4	nd	13	1.3	6.5	0.6
18		Total HxCDD	0	nd	13.2	0.0	6.6	0.0	nd	56.8	0.0	28.4	0.0	nd	33	0.0	16.3	0.0
19		1,2,3,4,6,7,8-HpCDD	0.01		40.4	0.4	40.4	0.4		77.4	0.8	77.4	0.8		47	0.5	47.4	0.5
20		Total HpCDD	0		66.1	0.0	66.1	0.0		121	0.0	121.0	0.0		73	0.0	72.8	0.0
21		OCDD	0.001		249.0	0.2	249.0	0.2		479	0.5	479.0	0.5		295	0.3	295.0	0.3
22		2,3,7,8-TCDF	0.1		55.0	5.5	55.0	5.5		101	10.1	101.0	10.1		58	5.8	58.0	5.8
23		Total TCDF	0		280.0	0.0	280.0	0.0		463	0.0	463.0	0.0		310	0.0	310.0	0.0
24		1,2,3,7,8-PCDF	0.05		34.0	1.7	34.0	1.7		77	3.9	77.0	3.9		54	2.7	54.0	2.7
25		2,3,4,7,8-PCDF	0.5		27.0	13.5	27.0	13.5		51	25.5	51.0	25.5		31	15.5	31.0	15.5
26		Total PCDF	0		288.0	0.0	288.0	0.0		556	0.0	556.0	0.0		346	0.0	346.0	0.0
27		1,2,3,4,7,8-HxCDF	0.1		222.0	22.2	222.0	22.2		449	44.9	449.0	44.9		288	28.8	288.0	28.8
28		1,2,3,6,7,8-HxCDF	0.1		66.0	6.6	66.0	6.6		142	14.2	142.0	14.2		84	8.4	84.0	8.4
29		2,3,4,6,7,8-HxCDF	0.1		33.0	3.3	33.0	3.3		61	6.1	61.0	6.1		39	3.9	39.0	3.9
30		1,2,3,7,8,9-HxCDF	0.1		38.0	3.8	38.0	3.8		65	6.5	65.0	6.5		41	4.1	41.0	4.1
31		Total HxCDF	0		693.0	0.0	693.0	0.0		1396	0.0	1396.0	0.0		853	0.0	853.0	0.0
32		1,2,3,4,6,7,8-HpCDF	0.01		824.0	8.2	824.0	8.2		1736	17.4	1736.0	17.4		1019	10.2	1019.0	10.2
33		1,2,3,4,7,8,9-HpCDF	0.01		243.0	2.4	243.0	2.4		554	5.5	554.0	5.5		324	3.2	324.0	3.2
34		Total HpCDF	0		1671.0	0.0	1671.0	0.0		3510	0.0	3510.0	0.0		2056	0.0	2056.0	0.0
35		OCDF	0.001		9530.0	9.5	9530.0	9.5		16840	16.8	16840.0	16.8		11030	11.0	11030.0	11.0
36																		
37		Gas sample volume (dscf)				110.09	110.09	110.09			113.88	113.88	113.88			112.38	112.38	112.38
38		O2 (%)				8.54	8.54	8.54			8.5	8.5	8.5			8.43	8.43	8.43
39																		
40		PCDD/PCDF (pg in sample)				86.1930	12788.1	81.8230			160.0030	23399.5	156.0730			104.2	14984.6	99.3
41		PCDD/PCDF (ng/dscm @ 7% O2)		10.1		0.0311	4.61	0.0295	4.9		0.0556	8.13	0.0542	9.4		0.0365	5.25	0.0348
42																		
43		TEQ Cond Avg	0.040															
44		Total Cond Avg	6.00															