

US EPA ARCHIVE DOCUMENT

	B	C
1	<b>Source Description</b>	
2		
3	Phase I ID No.	904
4	EPA ID No.	MSD033417031
5	Facility Name	First Chemical Corporation
6	Facility Location	
7	City	Pascagoula
8	State	MS
9	Unit ID Name/No.	
10	Other Sister Facilities	None
11	Number of Sister Facilities	0
12	Combustor Class	Onsite incinerator
13	Combustor Type	Controlled air
14	Combustor Characteristics	John Zink model, starved air
15	Capacity (MMBtu/hr)	
16	Soot Blowing	
17	APCS Detailed Acronym	WHB
18	APCS General Class	WHB
19	APCS Characteristics	Waste heat boiler
20	Hazardous Wastes	Liq
21	Haz Waste Description	
22	Supplemental Fuel	
23		
24	Stack Characteristics	
25	Diameter (ft)	1.9
26	Height (ft)	181.0
27	Gas Velocity (ft/sec)	18.7
28	Gas Temperature (°F)	528.8
29		
30	Permitting Status	
31	HWC Burn Status (Date if Terminated)	

	B	C
1	<b>Condition Description</b>	
2		
3	<b>904C1</b>	
4		
5	Report Name/Date	Source Emissions Survey of First Chemical Corp. Hazardous Waste Incinerator Stack, Trial Burn Report, MSD 033417031, Pascagoula, Mississippi July 1991, Metco File Number 90-199
6	Report Prepare	METCO Environmental
7	Testing Firm	METCO Environmental
8	Cond Descr	Trial burn, WASTE 1
9	Testing Dates	July 11, 1991
10	Cond Dates	Jul-91
11		
12	<b>904C2</b>	
13		
14	Report Name/Date	Source Emissions Survey of First Chemical Corp. Hazardous Waste Incinerator Stack, Trial Burn Report, MSD 033417031, Pascagoula, Mississippi July 1991, Metco File Number 90-199
15	Report Prepare	METCO Environmental
16	Testing Firm	METCO Environmental
17	Cond Descr	Trial burn, WASTE 2
18	Testing Dates	July 13-14, 1991
19	Cond Dates	Jul-91
20		
21	<b>904C3</b>	
22		
23	Report Name/Date	Source Emissions Survey of First Chemical Corp. Hazardous Waste Incinerator Stack, Trial Burn Report, MSD 033417031, Pascagoula, Mississippi July 1991, Metco File Number 90-199
24	Report Prepare	METCO Environmental
25	Testing Firm	METCO Environmental
26	Cond Descr	Trial burn, WASTE 1&2
27	Testing Dates	July 16-17, 1991
28	Cond Dates	Jul-91
29		
30	<b>904C4</b>	
31		
32	Report Name/Date	Trial Burn Report of First Chemical Corporation, Noxidizer Incinerator Stack, Pascagoula, Mississippi, Volume I Prepared by METCO Environmental, April 1, 1995
33	Report Prepare	METCO Environmental
34	Testing Firm	METCO Environmental
35	Cond Descr	?
36	Testing Dates	April 4-5, 1995
37	Cond Date	Apr-95
38		
39	<b>904C5</b>	
40		
41	Report Name/Date	Trial Burn Report of First Chemical Corporation, Noxidizer Incinerator Stack, Pascagoula, Mississippi, Volume I Prepared by METCO Environmental, April 1, 1995
42	Report Prepare	METCO Environmental
43	Testing Firm	METCO Environmental
44	Cond Descr	?
45	Test Dates	April 6-7, 1995
46	Cond Date	April-95

	B	C	D	E	F	G	H	I	J	K	L	M
1	<b>Stack Gas Emissions 2</b>											
2												
3												
4	<b>904C1</b>					R1		R2		R3		Cond Avg
5												
6	PM	E1	gr/dscf	y		0.0153		0.0130		0.0108		0.0130
7	CO (RA)	E1	ppmv	y	nd	0.8		0.4		0.8		0.63
8	HC (RA)	E1	ppmv	y		8.3		9.5		5.7		7.83
9												
10	Sampling Train	Particulate	E1									
11	Stack Gas Flowrate		dscfm			2598.0		2533.0		2698.0		
12	O2		%			2.3		2.6		2.6		
13	Moisture		%			19.3		18.1		18.0		
14	Temperature		°F			365.0		364.0		364.0		
15												
16	Sampling Train	SVOC	E2									
17	Stack Gas Flowrate		dscfm			2527.0		2644.0		2673.0		
18	O2		%			2.4		2.6		2.7		
19	Moisture		%			14.1		14.3		14.8		
20	Temperature		°F			363.0		361.0		348.0		
21												
22	Aniline	DRE	%			99.9999		99.9999		99.9999		
23	Nitrobenzene	DRE	%			99.9999		99.9999		99.9999		
24	Phenylenediamine	DRE	%			99.9999		99.9999		99.9999		
25												
26	<b>904C2</b>					R1		R2		R3		Cond Avg
27												
28	PM	E1	gr/dscf	y		0.0041		0.0029		0.0030		0.0033
29	CO (RA)	E1	ppmv	y	nd	0.4		0.1	nd	0.4		0.3
30	HC (RA)	E1	ppmv	y		5.0		5.6		4.5		5.0
31												
32	Sampling Train	Particulate	E1									
33	Stack Gas Flowrate		dscfm			2531.0		2493.0		2673.0		
34	O2		%			2.9		2.4		2.4		
35	Moisture		%			17.2		16.7		16.8		
36	Temperature		°F			357.0		363.0		371.0		
37												
38	Sampling Train	SVOC	E2									
39	Stack Gas Flowrate		dscfm			2571.0		2513.0		2599.0		
40	O2		%			2.5		2.4		2.4		
41	Moisture		%			14.1		13.4		13.5		
42	Temperature		°F			357.0		355.0		348.0		
43												
44	Dinitroresol	DRE	%			99.9999		99.9999		99.9999		
45	Dinitrophenol	DRE	%			99.9999		99.9999		99.9999		
46	Nitrobenzene	DRE	%			99.9999		99.9999		99.9999		
47	Toluene	DRE	%			99.9999		99.9999		99.9999		
48												
49	<b>904C3</b>					R1		R2		R3		Cond Avg
50												
51	PM	E1	gr/dscf	y		0.0103		0.0107		0.0282		0.0164
52	CO (RA)	E1	ppmv	y	nd	0.4	nd	0.4	nd	0.4		0.4
53	HC (RA)	E1	ppmv	y		9.8		10.3		7.7		9.3
54												
55	Sampling Train	Particulate	E1									
56	Stack Gas Flowrate		dscfm			4183.0		4264.0		4115.0		
57	O2		%			2.4		2.6		2.8		
58	Moisture		%			16.0		16.7		17.1		
59	Temperature		°F			442.0		455.0		449.0		
60												
61	Sampling Train	SVOC	E2									
62	Stack Gas Flowrate		dscfm			4473.0		4240.0		4038.0		
63	O2		%			2.5		2.6		2.8		
64	Moisture		%			12.5		12.4		13.4		
65	Temperature		°F			430.0		444.0		437.0		
66												
67	Dinitroresol	E2	%			99.9999		99.9999		99.9999		
68	Dinitrophenol	E2	%			99.9999		99.9999		99.9999		
69	Nitrobenzene	E2	%			99.9999		99.9999		99.9999		
70	Toluene	E2	%			99.9999		99.9999		99.9999		
71												

	B	C	D	E	F	G	H	I	J	K	L	M
72	<b>904C4</b>					R1		R2		R3		Cond Avg
73												
74	PM	E1	gr/dscf	y		0.0247		0.0164		0.0150		0.0187
75	CO (RA)	E1	ppmv	y	nd	0.4	nd	0.4	nd	0.4		0.40
76	HCl	E1	ppmv	y		0.862		0.120		0.077		0.35
77	Cl2	E1	ppmv	y		0.011		0.006		0.004		0.01
78	Total Chlorine	E1	ppmv	y		0.885		0.133		0.085		0.37
79												
80	Sampling Train	Particulate	E1									
81	Stack Gas Flowrate		dscfm			4561.0		4544.0		4657.0		
82	O2		%			3.3		3.8		3.8		
83	Moisture		%			14.6		13.9		14.4		
84	Temperature		°F			520.0		498.0		518.0		
85												
86	Sampling Train	SVOC	E2									
87	Stack Gas Flowrate		dscfm			4408.0		4488.0		4516.0		
88	O2		%			3.3		3.8		3.8		
89	Moisture		%			14.0		14.0		13.8		
90	Temperature		°F			526.0		527.0		523.0		
91												
92	2,4-Dinitrophenol	E2	%			99.9999		99.9999		99.9999		
93	4,6-Dinitro-o-Cresol	E2	%			99.9994		99.9993		99.9995		
94	Benzene	E2	%			99.9985		99.999		99.9994		
95	Toluene	E2	%			99.9999		99.9999		99.9999		
96												
97	<b>904C5</b>					R1		R2		R3		Cond Avg
98												
99	PM	E1	gr/dscf	y		0.0202		0.0167		0.0327		0.0232
100	CO (RA)	E1	ppmv	y		0.8		0.8		2.2		1.27
101	HCl	E1	ppmv	y		0.040		0.025		0.361		0.14
102	Cl2	E1	ppmv	y		0.010		0.007		0.010		0.01
103	Total Chlorine	E1	ppmv	y		0.059		0.040		0.381		0.16
104												
105	Sampling Train	Particulate	E1									
106	Stack Gas Flowrate		dscfm			4659.0		4721.0		4972.0		
107	O2		%			3.2		3.2		4.1		
108	Moisture		%			15.0		15.3		15.0		
109	Temperature		°F			521.0		529.0		534.0		
110												
111	Sampling Train	SVOC	E2									
112	Stack Gas Flowrate		dscfm			4571.0		4692.0		5525.0		
113	O2		%			3.2		3.2		4.1		
114	Moisture		%			14.3		14.4		14.3		
115	Temperature		°F			521.0		534.0		534.0		
116												
117	Benzene	E2	%			99.9999		99.9999		99.9999		
118	Nitrobenzene	E2	%			99.9999		99.9999		99.9999		

	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	<b>Feedstream 2</b>																										
2																											
3																											
4	<b>904C1</b>																										
5	Feedstream Number																										
6	Feed Class																										
7	Feed Class 2																										
8	Feedstream Description																										
9																											
10	Feed Rate	lb/hr																									
11	Heating value	Btu/lb																									
12	Ash	wt %																									
13	Chlorine	ppmv																									
14																											
15	Antimony	lb/hr																									
16	Arsenic	lb/hr																									
17	Barium	lb/hr																									
18	Beryllium	lb/hr																									
19	Cadmium	lb/hr																									
20	Chromium	lb/hr																									
21	Lead	lb/hr																									
22	Mercury	lb/hr																									
23	Silver	lb/hr																									
24	Thallium	lb/hr																									
25																											
26	Stack gas flowrate	scfm																									
27	Oxygen	%																									
28																											
29																											
30	<b>Feedrate MTECs Calculation</b>																										
31	Ash	mg/dscm	y																								
32	Chlorine	ug/dscm	y																								
33																											
34	Antimony	ug/dscm	y																								
35	Arsenic	ug/dscm	y																								
36	Barium	ug/dscm	y																								
37	Beryllium	ug/dscm	y																								
38	Cadmium	ug/dscm	y																								
39	Chromium	ug/dscm	y																								
40	Lead	ug/dscm	y																								
41	Mercury	ug/dscm	y																								
42	Silver	ug/dscm	y																								
43	Thallium	ug/dscm	y																								
44																											
45	SVM	ug/dscm	y																								
46	LVM	ug/dscm	y																								
47																											
48																											
49	<b>904C2</b>																										
50	Feedstream Number																										
51	Feed Class																										
52	Feed Class 2																										
53	Feedstream Description																										
54																											
55	Feed Rate	lb/hr																									
56	Heating value	Btu/lb																									
57	Ash	wt %																									
58	Chlorine	ppmv																									
59																											
60	Antimony	lb/hr																									

	B	AC	AD	AE	AF	AG
1	<b>Feedstream 2</b>					
2						
3						
4	<b>904C1</b>	R3		Cond Avg		
5	Feedstream Number					
6	Feed Class	F2		F2		
7	Feed Class 2	Total		Total		
8	Feedstream Description			Total		
9	Feed Rate					
10	Heating value					
11	Ash					
12	Chlorine					
13						
14						
15	Antimony					
16	Arsenic					
17	Barium					
18	Beryllium					
19	Cadmium					
20	Chromium					
21	Lead					
22	Mercury					
23	Silver					
24	Thallium					
25						
26						
27	Stack gas flowrate					
28	Oxygen					
29						
30	<b>Feedrate MTECs Calcu</b>					
31	Ash	54		37.0		
32	Chlorine	2104		2164.0		
33						
34	Antimony	841	50	1151.9		
35	Arsenic	88	100	90.2		
36	Barium	841	100	865.6		
37	Beryllium	21	100	21.6		
38	Cadmium	18	100	18.0		
39	Chromium	35	100	36.1		
40	Lead	841	100	865.6		
41	Mercury	0.1	100	1.44E-01		
42	Silver	841	100	865.6		
43	Thallium	84	100	86.6		
44						
45	SVM	859	100	883.61		
46	LVM	72	100	98.39		
47						
48						
49	<b>904C2</b>	R3		Cond Avg		
50						
51	Feedstream Number					
52	Feed Class	F2		F2		
53	Feed Class 2	Total		Total		
54	Feedstream Description			Total		
55	Feed Rate					
56	Heating value					
57	Ash					
58	Chlorine					
59						
60	Antimony					

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		
61	Arsenic	lb/hr									1	0.000465	1	0.00047	1	0.000465												
62	Barium	lb/hr									1	0.00465	1	0.00465	1	0.00465												
63	Beryllium	lb/hr									1	0.000093	1	9.3E-05	1	0.000093												
64	Cadmium	lb/hr									1	0.000465	1	0.00047	1	0.000465												
65	Chromium	lb/hr									1	0.000465	1	0.00047	1	0.000465												
66	Lead	lb/hr									1	0.00465	1	0.00465	1	0.00465												
67	Mercury	lb/hr									1	1.86E-06	1	1.9E-06	1	1.86E-06												
68	Silver	lb/hr									1	0.00465	1	0.00465	1	0.00465												
69	Thallium	lb/hr									1	0.000465	1	0.00047	1	0.000465												
70																												
71	Stack gas flowrate	scfm									2531	2493	2493	2673														
72	Oxygen	%									2.9	2.4	2.4															
73																												
74	<b>Feedrate MTECs Calculation</b>																											
75	Ash	mg/dscm	y								10	3	2552	100	2101	5												
76	Chlorine	ug/dscm	y								100	2280	100	2252	100	2101												
77																												
78	Antimony	ug/dscm	y								100	380	100	375	100	350												
79	Arsenic	ug/dscm	y								100	38	100	38	100	35												
80	Barium	ug/dscm	y								100	380	100	375	100	350												
81	Beryllium	ug/dscm	y								100	8	100	8	100	7												
82	Cadmium	ug/dscm	y								100	38	100	38	100	35												
83	Chromium	ug/dscm	y								100	380	100	38	100	35												
84	Lead	ug/dscm	y								100	380	100	375	100	350												
85	Mercury	ug/dscm	y								100	0.15	100	0.15	100	0.14												
86	Silver	ug/dscm	y								100	380	100	375	100	350												
87	Thallium	ug/dscm	y								100	38	100	38	100	35												
88																												
89	SVM	ug/dscm	y								100	418	100	413	100	385												
90	LVM	ug/dscm	y								100	84	100	83	100	77												
91																												
92																												
93	<b>904C3</b>																											
94																												
95	Feedstream Number																											
96	Feed Class																											
97	Feed Class 2																											
98	Feedstream Description																											
99	Feed Rate	lb/hr																										
100	Heating value	Btu/lb																										
101	Ash	wt %																										
102	Chlorine	ppmv																										
103	Antimony	lb/hr																										
104	Arsenic	lb/hr																										
105	Barium	lb/hr																										
106	Beryllium	lb/hr																										
107	Cadmium	lb/hr																										
108	Chromium	lb/hr																										
109	Lead	lb/hr																										
110	Mercury	lb/hr																										
111	Silver	lb/hr																										
112	Thallium	lb/hr																										
113																												
114	Stack gas flowrate	scfm																										
115	Oxygen	%																										
116																												
117	<b>Feedrate MTECs Calculation</b>																											
118	Ash	mg/dscm	y																									
119	Chlorine	ug/dscm	y																									
120																												



	B	AC	AD	AE	AF	AG
61	Arsenic					
62	Barium					
63	Beryllium					
64	Cadmium					
65	Chromium					
66	Lead					
67	Mercury					
68	Silver					
69	Thallium					
70						
71	Stack gas flowrate					
72	Oxygen					
73						
74	<b>Feedrate MTECs Calcu</b>					
75	Ash	5		5.97		
76	Chlorine	1050		1105		
77						
78	Antimony	175	100	184		
79	Arsenic	18	100	18		
80	Barium	175	100	184		
81	Beryllium	4	100	4		
82	Cadmium	18	100	18		
83	Chromium	18	100	18		
84	Lead	175	100	184		
85	Mercury	0.07	100	0.07		
86	Silver	175	100	184		
87	Thallium	18	100	18		
88						
89	SVM	385	100	405		
90	LVM	77	100	81		
91						
92						
93	<b>904C3</b>		R3		Cond Avg	
94						
95	Feedstream Number		F3			
96	Feed Class		Total		F3	
97	Feed Class 2		Total		Total	
98	Feedstream Description				Composite	
99	Feed Rate					
100	Heating value					
101	Ash					
102	Chlorine					
103	Antimony					
104	Arsenic					
105	Barium					
106	Beryllium					
107	Cadmium					
108	Chromium					
109	Lead					
110	Mercury					
111	Silver					
112	Thallium					
113						
114	Stack gas flowrate					
115	Oxygen					
116						
117	<b>Feedrate MTECs Calcu</b>					
118	Ash		36		37	
119	Chlorine		1353		1313	
120						

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	
121	Antimony	ug/dscm	y	100	520	100	515	100	540	100	217	100	215	100	226	100	736	100	730	100	766	100	736	100	730	100	
122	Arsenic	ug/dscm	y	100	54	100	54	100	56	100	22	100	21	100	23	100	76	100	75	100	79	100	76	100	75	100	
123	Barium	ug/dscm	y	100	520	100	515	100	540	100	217	100	215	100	226	100	736	100	730	100	766	100	736	100	730	100	
124	Beryllium	ug/dscm	y	100	13	100	13	100	13	100	4	100	4	100	5	100	17	100	17	100	18	100	17	100	17	100	
125	Cadmium	ug/dscm	y	100	11	100	11	100	11	100	22	100	21	100	23	100	32	100	32	100	34	100	32	100	32	100	
126	Chromium	ug/dscm	y	100	22	100	21	100	22	100	22	100	21	100	23	100	43	100	43	100	45	100	43	100	43	100	
127	Lead	ug/dscm	y	100	520	100	515	100	540	100	217	100	215	100	226	100	736	100	730	100	766	100	736	100	730	100	
128	Mercury	ug/dscm	y	100	0.09	100	0.09	100	0.09	100	0.09	100	0.09	100	0.09	100	0.2	100	0.2	100	0.2	100	0.2	100	0.2	100	
129	Silver	ug/dscm	y	100	520	100	515	100	540	100	217	100	215	100	226	100	736	100	730	100	766	100	736	100	730	100	
130	Thallium	ug/dscm	y	100	52	100	52	100	54	100	22	100	21	100	23	100	74	100	73	100	77	100	74	100	73	100	
131																											
132	SVM	ug/dscm	y		530		526		551		238		236		249		769		762		800		769		762		
133	LVM	ug/dscm	y		89		88		92		48		47		50		136		135		142		136		135		
134																											
135																											
136																											
137	<b>904C4</b>																										
138	Feedstream Number																										
139	Feed Class																										
140	Feed Class 2																										
141	Feed Class 2																										
142	Feedstream Description																										
143	Feed Rate	lb/hr																									
144	Heating value	Btu/lb																									
145	Ash	wt%																									
146	Chlorine	wt %																									
147																											
148	Antimony	lb/hr																									
149	Arsenic	lb/hr																									
150	Barium	lb/hr																									
151	Beryllium	lb/hr																									
152	Cadmium	lb/hr																									
153	Chromium (Hex)	lb/hr																									
154	Lead	lb/hr																									
155	Mercury	lb/hr																									
156	Silver	lb/hr																									
157	Thallium	lb/hr																									
158																											
159	Stack gas flowrate	scfm																									
160	Oxygen	%																									
161																											
162	<b>Feedrate MTECs Calculation</b>																										
163	Ash	mg/dscm	y																								
164	Chlorine	ug/dscm	y																								
165																											
166	Antimony	ug/dscm	y																								
167	Arsenic	ug/dscm	y																								
168	Barium	ug/dscm	y																								
169	Beryllium	ug/dscm	y																								
170	Cadmium	ug/dscm	y																								
171	Chromium (Hex)	ug/dscm	y																								
172	Lead	ug/dscm	y																								
173	Mercury	ug/dscm	y																								
174	Silver	ug/dscm	y																								
175	Thallium	ug/dscm	y																								
176																											
177	SVM	ug/dscm	y																								
178	LVM	ug/dscm	y																								
179																											
180																											

	B	AC	AD	AE	AF	AG
121	Antimony	766	100	744		
122	Arsenic	79	100	77		
123	Barium	766	100	744		
124	Beryllium	18	100	18		
125	Cadmium	34	100	33		
126	Chromium	45	100	44		
127	Lead	766	100	744		
128	Mercury	0.2	100	0.2		
129	Silver	766	100	744		
130	Thallium	77	100	74		
131						
132	SVM	800	100	777		
133	LVM	142	100	138		
134						
135						
136						
137	<b>904C4</b>	R3	Cond Avg			
138						
139	Feedstream Number	F2				
140	Feed Class	Total	F2	Total		
141	Feed Class 2	Total	Total	Total		
142	Feedstream Description			Composite		
143	Feed Rate					
144	Heating value					
145	Ash					
146	Chlorine					
147						
148	Antimony					
149	Arsenic					
150	Barium					
151	Beryllium					
152	Cadmium					
153	Chromium (Hex)					
154	Lead					
155	Mercury					
156	Silver					
157	Thallium					
158						
159	Stack gas flowrate					
160	Oxygen					
161						
162	<b>Feedrate MTECs Calcu</b>					
163	Ash	1.03	100	1.04		
164	Chlorine					
165						
166	Antimony	12.05	100	12.1		
167	Arsenic	28.33	100	28.5		
168	Barium	14.63	100	14.7		
169	Beryllium	5.98	100	6.0		
170	Cadmium	68.72	100	69.0		
171	Chromium (Hex)	68.72	100	69.0		
172	Lead	10.30	100	22.9		
173	Mercury	16.90	100	13.7		
174	Silver	77.37	100	77.6		
175	Thallium	14.63	100	14.7		
176						
177	SVM	79		92		
178	LVM	103		103	As, Be and Cr <sup>6+</sup>	
179						
180						



	B	AC	AD	AE	AF	AG
181	904C5	R3				
182				Cond Avg		
183	Feedstream Number	F2				
184	Feed Class	Total		Total		
185	Feed Class 2	Total		Total		
186	Feedstream Description					
187	Feed Rate					
188	Heating value					
189	Ash					
190	Chlorine					
191						
192	Antimony					
193	Arsenic					
194	Barium					
195	Beryllium					
196	Cadmium					
197	Chromium (Hex)					
198	Lead					
199	Mercury					
200	Silver					
201	Thallium					
202						
203	Stack gas flowrate					
204	Oxygen					
205						
206	Feedrate MTECs Calcu					
207	Ash					
208	Chlorine	1.0		1.0		
209						
210	Antimony	11.3	100	11.2		
211	Arsenic	26.7	100	26.4		
212	Barium	13.7	100	13.6		
213	Beryllium	5.7	100	5.6		
214	Cadmium	64.6	100	64.0		
215	Chromium (Hex)	63.8	29	72.2		
216	Lead	9.7	46	14.2		
217	Mercury	20.3	0	21.7		
218	Silver	72.7	100	72.0		
219	Thallium	13.7	100	13.6		
220						
221	SYM	74.3	90	78.2		
222	LVM	96.2	51	104.2		