	B	C
1	**Source Description**	
2		
3	Phase I ID No.	712
4	EPA ID No.	NYD002014595
5	Facility Name	Nepera Incorporated
6	Facility Location	
7	City	Harriman
8	State	New York
9	Unit ID Name/No.	Incinerator
10	Other Sister Facilities	
11	Number of Sister Facilities	0
12	Combustor Class	Onsite incinerator
13	Combustor Type	Liquid injection
14	Combustor Characteristics	
15	Capacity (MMBtu/hr)	
16	Soot Blowing	Yes. Run 2 cond. 1
17	APCS Detailed Acronym	WHB
18	APCS General Class	WHB
19	APCS Characteristics	Waste Heat Boiler
20	Hazardous Wastes	Liq
21	Haz Waste Description	T-911, T-105 residue wastes, organic liq wastes
22	Supplemental Fuel	oil,natural gas
23		Fuel oil and natural gas
24	Stack Characteristics	
25	Diameter (ft)	5.00
26	Height (ft)	25.7
27	Gas Velocity (ft/sec)	48.5
28	Gas Temperature (°F)	770
29		
30	Permitting Status	Tier I for all metals except Cr (tier III)
31	HWC Burn Status (Date if Terminated)	

	B	C
1	**Condition Description**	
2		
3	**712C10**	
4		
5	Report Name/Date	Trial Burn Report, November 1995
6	Report Prepare	Entropy, Inc.
7	Testing Firm	Focus Environmental, Inc
8	Testing Dates	November 14-15, 1995
9	Cond Dates	Nov-95
10	Condition Descr	Trial burn, max feedrate, low temp
11	Content	PM, HCl/Cl2, DRE, PCDD/F
12		
13	**712C11**	
14		
15	Report Name/Date	Trial Burn Report, November 1995
16	Report Prepare	Entropy, Inc.
17	Testing Firm	Focus Environmental, Inc
18	Testing Dates	November 16, 1995
19	Cond Dates	Nov-95
20	Condition Descr	Trial burn, max feedrate, high temp
21	Content	PM, HCl/Cl2, metals
22		
23	**712C1**	
24		
25	Report Name/Date	Stationary Source Sampling Report, prepared for Nepera, Incorporated, prepared by ENTROPY Environmentalists, Emissions Testing, Incinerator Stack R238 VENT, February 1993, Harriman, New York, Reference # 11546
26	Report Prepare	ENTROPY Inc.
27	Testing Firm	ENTROPY Inc.
28	Cond Descr	?
29	Testing Dates	February 3, 1993
30	Cond Date	Feb-93
31		
32	**712C2**	
33		
34	Report Name/Date	Stationary Source Sampling Report, prepared for Nepera, Incorporated, prepared by ENTROPY Environmentalists, Emissions Testing, Incinerator Stack R238 VENT, September 1992, Harriman, New York, Reference # 11179
35	Report Prepare	ENTROPY Inc.
36	Testing Firm	ENTROPY Inc.
37	Cond Descr	?
38	Testing Dates	September 23-24, 1992
39	Cond Date	Sep-92

	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												
6	**712C10**					R1		R2		R3		Cond Avg
7												
8	PM	E1	gr/dscf	y		0.0277		0.0181		0.0328		0.0262
9	CO (RA)	E1	ppmv	y		20.5		18.5		12.1		17.03
10	CO (MHRA)	E1	ppmv	y		28.1		21.7		12.5		20.77
11	HCN	E1	ug/dscm	y		20.1		61.3		32		37.80
12												
13	HCl	E1	ppmv	y	nd	0.0212	nd	0.0196	nd	0.0216		0.0
14	Cl2	E1	ppmv	y		0.123		0.0202	nd	0.0223		0.1
15	Total Chlorine	E1	ppmv	y		0.27		0.06		0.07		0.1
16												
17	POHC DRE	Benzene										
18	POHC Feedrate		lb/hr			596.2		661.3		658.7		
19	Emission Rate		lb/hr		nd	1.02E-04	nd	5.51E-05	nd	5.71E-05		
20	DRE		%			99.99998		99.999991		99.99998		
21												
22	POHC DRE	Pyridyne										
23	POHC Feedrate		lb/hr			385.29		326.29		299.66		
24	Emission Rate		lb/hr			8.15E-04		3.33E-04		4.32E-04		
25	DRE		%			99.9997		99.9998		99.9998		
26												
27	Sampling Train	PM, HCl/Cl2	E1									
28	Stack Gas Flowrate		dscfm			16077		15504		15690		15757.0
29	O2		%			5.2		5		5.2		5.1
30	Moisture		%			33.3		33.9		34.4		33.9
31	Temperature		°F			771		776		773		773.3
32												
33	Sampling Train	PCDD/F	E2									
34	Stack Gas Flowrate		dscfm			15819.0		15005		14916.0		15246.7
35	O2		%			5.2		5		5.2		5.1
36	Moisture		%			33.4		33.4		33.6		33.5
37	Temperature		°F			774		783		793		783.3
38												
39	**712C11**					R1		R2		R3		Cond Avg
40												
41	PM	E1	gr/dscf	y		0.0165		0.0281		0.0147		0.020
42	CO (RA)	E1	ppmv	y		0.1		0.1		0.1		0.1
43	CO (MHRA)	E1	ppmv	y		0.6		0.1		0.1		0.3
44	HCl	E1	ppmv	y	nd	0.0205	nd	0.0202	nd	0.0223	100	0.0
45	Cl2	E1	ppmv	y	nd	0.021		0.439		0.487		0.3
46	Total Chlorine	E1	ppmv	y		0.06		0.90		1.00		0.7
47												
48	Metals											
49	Antimony	E3	ug/dscm	y	nd	0.386	nd	1.37	nd	0.512		0.8
50	Arsenic	E3	ug/dscm	y	nd	0.794	nd	0.931	nd	0.822		0.8
51	Barium	E3	ug/dscm	y		3.89	nd	4.74		4.64		4.4
52	Beryllium	E3	ug/dscm	y	nd	0.0672	nd	0.062	nd	0.0719		0.1
53	Cadmium	E3	ug/dscm	y	nd	0.0672	nd	0.062		0.116		0.1
54	Chromium	E3	ug/dscm	y		12.4		12.5		13.2		12.7
55	Chromium (Hex)	E2	ug/dscm	y		3.65		6.42		5.32		5.1
56	Lead	E3	ug/dscm	y		2.14		1.85		3.76		2.6
57	Mercury	E3	ug/dscm	y	nd	2.55	nd	2.79	nd	2.62	100	2.7
58	Nickel	E3	ug/dscm	y		6.89		8.36		8.81		8.0
59	Selenium	E3	ug/dscm	y	nd	0.533		1.53	nd	0.587		0.9
60	Silver	E3	ug/dscm	y	nd	0.134	nd	0.124	nd	0.143		0.1
61	Thallium	E3	ug/dscm	y	nd	0.202	nd	0.186	nd	0.215		0.2
62	SVM	E3	ug/dscm	y		2.21		1.91		3.88		2.7
63	LVM	E3	ug/dscm	y		13.26		13.49		14.09		13.6
64												
65	Sampling Train	PM, HCl/Cl2	E1									
66	Stack Gas Flowrate		dscfm			16958		14463		14428		15283.0
67	O2		%			4.1		3		4.6		3.9
68	Moisture		%			27.7		36.6		36.3		33.5
69	Temperature		°F			803		782		786		790.3
70												
71	Sampling Train	Cr+6	E2									

	B	C	D	E	F	G	H	I	J	K	L	M
72	Stack Gas Flowrate		dscfm			13910.0		15608		14358.0		14625.3
73	O2		%			4.1		3		4.6		3.9
74	Moisture		%			30.9		28.8		31.2		30.3
75	Temperature		°F			804		790		794		796.0
76												
77	Sampling Train	Metals	E3									
78	Stack Gas Flowrate		dscfm			19564.0		17156		17661.0		18127.0
79	O2		%			4.1		3		4.6		3.9
80	Moisture		%			32.1		36.8		36.8		35.2
81	Temperature		°F			819		813		804		812.0

	B	C	D	E	F	G	H	I	J	K	L	M	Y
1	**Stack Gas Emissions 2**												
2													
3													
4		Comments	Units	7%O2									
5	**712C1**					R1		R2		R3		Cond Avg	
6													
7	PM	E2	gr/dscf	y		0.0234		0.0230		0.0663		0.0376	
8													
9	Arsenic	E2	ug/dscm	y	nd	0.9	nd	0.9		2.5		1.44	
10	Beryllium	E2	ug/dscm	y	nd	0.1	nd	0.1	nd	0.1		0.09	
11	Cadmium	E2	ug/dscm	y	nd	0.4		0.5		0.6		0.48	
12	Chromium	E2	ug/dscm	y		24.8		31.9		93.4		50.04	
13	Chromium (Hex)	E1	ug/dscm	y		12.4		6.5		4.8		7.91	
14	Nickel	E2	ug/dscm	y		77.0		77.7		242.9		132.55	
15													
16	SVM	E2	ug/dscm	y		0.4		0.5		0.6		0.48	(Cd only)
17	LVM	E2	ug/dscm	y		25.8		32.9		96.0		51.6	
18													
19	Sampling Train	Cr Hex	E1										
20	Stack Gas Flowrate		dscfm			21319.0		21044.0		21086.0			
21	O2		%			5.2		5.1		5.1			
22	Moisture		%			33.0		32.6		34.5			
23	Temperature		°F			708.0		714.0		712.0			
24													
25	Sampling Train	Metals	E2										
26	Stack Gas Flowrate		dscfm			21542.0		20654.0		21384.0			
27	O2		%			5.2		5.1		5.1			
28	Moisture		%			34.5		35.0		34.8			
29	Temperature		°F			697.0		717.0		689.0			
30													
31													
32													
33	**712C2**					R1		R2		R3		Cond Avg	
34													
35	PM	E2	gr/dscf	y		0.0207		0.0271		0.0207		0.0228	
36													
37	Arsenic	E2	ug/dscm	y	nd	0.5		0.8	nd	0.5		0.61	
38	Beryllium	E2	ug/dscm	y		0.1		0.1		0.1		0.08	
39	Cadmium	E2	ug/dscm	y	nd	0.5		0.8	nd	0.5		0.62	
40	Chromium	E2	ug/dscm	y		9.4		11.5		6.6		9.13	
41	Chromium (Hex)	E1	ug/dscm	y		6.3		6.5		3.7		5.49	
42	Nickel	E2	ug/dscm	y		7.9		9.6		5.8		7.76	
43	Selenium	E2	ug/dscm	y		1.2	nd	0.5		0.7		0.81	
44													
45	SVM	E2	ug/dscm	y		0.5		0.8		0.5		0.62	(Cd only)
46	LVM	E2	ug/dscm	y		9.9		12.3		7.2		9.8	
47													
48	Sampling Train	Cr Hex	E1										
49	Stack Gas Flowrate		dscfm			18527.0		17998.0		18225.0			
50	O2		%			5.1		4.6		4.4			
51	Moisture		%			35.8		35.9		36.8			
52	Temperature		°F			675.0		676.0		687.0			
53													
54	Sampling Train	Metals	E2										
55	Stack Gas Flowrate		dscfm			16819.0		17549.0		16907.0			
56	O2		%			5.1		4.6		4.4			
57	Moisture		%			35.8		35.2		36.2			
58	Temperature		°F			674.0		677.0		685.0			

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	**Feedstream 1**																							
2																								
3																								
4	**712C10**	**Trial burn**			R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2	
5																								
6	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3	
7	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Gaseous HW		Gaseous HW	
8	Feed Class 2																							
9	Feedstream Description				Wastewater		Wastewater		Wastewater		Wastewater		T911		T911		T911		T911		R240 Fumes		R240 Fumes	
10	Feed Rate		kg/min		120.1		120.3		120.3		120.2		11		11.1		11		11.0		3		3.6	
11	Feed Rate		m3/min																					
12	Density		g/ml		0.937		0.99		0.991				0.997		0.921		0.926							
13	Heating Value		MM Btu/lb																					
14	Ash		g/min		3.600		31.280		25.26		20.0		3.3		3.33		3.31		3.3					
15	Chlorine		g/min		3.330		2.920		3.64		3.3		0.44		0.12		0.12		0.2					
16																								
17	Stack Gas Flowrate		dscfm		15757.0																			
18	Oxygen		%		5.1																			
19																								
20	Thermal Feedrate		MMBtu/hr																					
21	Estimated Firing Rate		MMBtu/hr																					
22																								
23	*Feedrate MTEC Calculations*																							
24	Ash		mg/dscm	y	7.1		61.9		50.0		39.7		6.5		6.6		6.5		6.6					
25	Chlorine		ug/dscm	y	6589.1		5777.8		7202.5		6523.2		870.6		237.4		237.4		448.5					
26																								
27	**712C11**	**Trial burn**			R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2	
28																								
29	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3	
30	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Gaseous HW		Gaseous HW	
31	Feed Class 2																							
32	Feedstream Description				Wastewater		Wastewater		Wastewater		Wastewater		T-105		T-105		T-105		T-105		R240 Fumes		R240 Fumes	
33	Feed Rate		kg/min		120.2		120.2		120.2		120.2		11.1		11.1		11.1		11.1		3.9		3.8	
34	Feed Rate		m3/min																					
35	Density		g/ml		0.998		0.993		0.992				0.977		1		0.994							
36	Heating Value		MM Btu/lb																					
37	Ash		g/min		24.0		25.2		22.84		24.0		28.6		37.12		9.64		25.1					
38	Chlorine		g/min		5.3		4.8		3.64		4.6		0		0.11		0.11		0.1					
39	Chromium		mg/min	nd	3.61	nd	2.16	nd	1.92		1.3	nd	6.4	nd	6.4	nd	6.51		3.2		0.0144		0.016	
40	Antimony		mg/min	nd	1.08	nd	1.08	nd	1.08		0.5	nd	8.6	nd	8.6	nd	8.69		4.3		0.00622		0.00981	
41	Arsenic		mg/min		22		20.6		20.4		21.0		15.0		16.2		15.00		15.4		0.0306		0.0255	
42	Barium		mg/min		3.61		2.04		1.68		2.4	nd	4.3	nd	4.3	nd	4.34		2.2	nd	0.00422		0.00528	nd
43	Beryllium		mg/min	nd	0.24	nd	0.24	nd	0.24		0.1	nd	2.2	nd	2.2	nd	2.17		1.1	nd	0.000355	nd	0.000383	nd
44	Cadmium		mg/min	nd	0.24	nd	0.24	nd	0.24		0.1	nd	2.2	nd	2.2	nd	2.17		1.1	nd	0.000362	nd	0.000408	nd
45	Lead		mg/min		3.37		3.25		3.13		1.6		7.8		4.3		4.34		5.5		0.0111		0.00635	nd
46	Mercury		mg/min	nd	4.69		4.45	nd	4.33		3.0	nd	0.4		0.4	nd	0.42		0.3	nd	0.00795	nd	0.00686	nd
47	Nickel		mg/min		1.68		1.08		0.841		1.2	nd	6.4		7.8	nd	6.51		4.7	nd	0.00784	nd	0.00868	nd
48	Selenium		mg/min		53.8		51.4		50.2		51.8		66.2		36.9		65.30		56.1		0.104		0.101	
49	Silver		mg/min	nd	0.481	nd	0.481	nd	0.481		0.2	nd	4.3	nd	4.3	nd	4.34		2.2	nd	0.000714	nd	0.000769	nd
50	Thallium		mg/min	nd	0.841	nd	0.841	nd	0.841		0.4	nd	10.7	nd	10.7	nd	10.90		5.4	nd	0.00107	nd	0.00115	nd
51																								
52	Stack Gas Flowrate		dscfm		18127.0																			
53	Oxygen		%		3.9																			
54																								
55	Thermal Feedrate		MMBtu/hr																					
56	Estimated Firing Rate		MMBtu/hr																					
57																								
58	*Feedrate MTEC Calculations*																							
59	Ash		mg/dscm	y	47.6		49.9		45.2		47.6		56.5		73.4		19.1		49.7					
60	Chlorine		ug/dscm		10487.2		9577.0		7202.5		9088.9		217.7		217.7		217.7		217.7					

	B	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV
1	**Feedstream 1**																							
2																								
3																								
4	**712C10**	R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2
5																								
6	Feedstream Number	F3		F3		F4		F4		F4		F4		F5		F5		F5		F5				
7	Feed Class	Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW				
8	Feed Class 2																					HW		HW
9	Feedstream Description	R240 Fumes		R240 Fumes		R238 Fumes		R238 Fumes		R238 Fumes		R238 Fumes		Plant Vent		Plant Vent		Plant Vent		Plant Vent				
10	Feed Rate	3.7		3.4										23.9		23.4		23.9		23.7				
11	Feed Rate					196.7		194.7		195.7		195.7												
12	Density																							
13	Heating Value																							
14	Ash																							
15	Chlorine																							
16																								
17	Stack Gas Flowrate																							
18	Oxygen																							
19																								
20	Thermal Feedrate																							
21	Estimated Firing Rate																							
22																								
23	*Feedrate MTEC Calculations*																							
24	Ash																					13.7		68.5
25	Chlorine																					7459.7		6015.3
26																								
27	**712C11**	R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2
28																								
29	Feedstream Number	F3		F3		F4		F4		F4		F4		F5		F5		F5		F5				
30	Feed Class	Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW				
31	Feed Class 2																					HW		HW
32	Feedstream Description	R240 Fumes		R240 Fumes		R238 Fumes		R238 Fumes		R238 Fumes		R238 Fumes		Plant Vent		Plant Vent		Plant Vent		Plant Vent				
33	Feed Rate	4		3.9										24.3		24.4		24.4		24.4				
34	Feed Rate					186.1		187.8		191.3														
35	Density																							
36	Heating Value																							
37	Ash																							
38	Chlorine																							
39	Chromium	0.0168		1.6E-02		1.06		1.31		1.01		1.1E+00		0.132		0.104		0.103		1.1E-01				
40	Antimony	0.00681		7.6E-03		0.573		0.406		0.804		5.9E-01		0.0568		0.0611		0.0368		5.2E-02				
41	Arsenic	0.0229		2.6E-02		0.327		0.152	nd	0.198		1.4E-01		0.0511		0.0646		0.0482		5.5E-02				
42	Barium	0.00702		3.6E-03		0.364		0.407		0.453		4.1E-01	nd	0.0415	nd	0.0297	nd	0.0367		1.8E-02				
43	Beryllium	0.000384		1.9E-04	nd	0.019	nd	0.0202	nd	0.0201		9.9E-03	nd	0.00246	nd	0.00285	nd	0.00231		1.3E-03				
44	Cadmium	0.000685		2.4E-04	nd	0.0597	nd	0.0252	nd	0.123		3.5E-02	nd	0.00246	nd	0.00285	nd	0.00231		1.3E-03				
45	Lead	0.00398		6.5E-03		0.656	nd	0.129		0.181		3.0E-01	nd	0.00677	nd	0.0165	nd	0.00936		5.4E-03				
46	Mercury	0.00741		3.7E-03	nd	0.405	nd	0.383	nd	0.395		2.0E-01	nd	0.0499	nd	0.0316	nd	0.0327		1.9E-02				
47	Nickel	0.00872		4.2E-03		0.61		1.25		1.18		1.0E+00	nd	0.054	nd	0.119	nd	0.0495		3.7E-02				
48	Selenium	0.0749		9.3E-02		2.66		0.943		0.715		1.4E+00		0.195		0.206		0.162		1.9E-01				
49	Silver	0.000768		3.8E-04	nd	0.0486	nd	0.0631	nd	0.0526		2.7E-02	nd	0.00495	nd	0.00569	nd	0.00462		2.5E-03				
50	Thallium	0.00115		5.6E-04	nd	0.0571	nd	0.0607	nd	0.0605		3.0E-02	nd	0.00741	nd	0.00854	nd	0.00693		3.8E-03				
51																								
52	Stack Gas Flowrate																							
53	Oxygen																							
54																								
55	Thermal Feedrate																							
56	Estimated Firing Rate																							
57																								
58	*Feedrate MTEC Calculations*																							
59	Ash																					104.1		123.4
60	Chlorine																					10704.8		9794.6

	B	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP
1	**Feedstream 1**																				
2																					
3																					
4	**712C10**		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
5																					
6	Feedstream Number						F6		F6		F6		F6		F7		F7		F7		F7
7	Feed Class						NG		NG		NG		NG		Total		Total		Total		Total
8	Feed Class 2		HW		HW		MF		MF		MF		MF		Total		Total		Total		Total
9	Feedstream Description						Natural Gas		Natural Gas		Natural Gas		Natural Gas		Total		Total		Total		Total
10	Feed Rate														158.0		158.4		158.9		158.4
11	Feed Rate						18.1		17.1		17		17.4								
12	Density																				
13	Heating Value																				
14	Ash														6.9		34.6		28.6		23.4
15	Chlorine														3.8		3.0		3.8		3.5
16																					
17	Stack Gas Flowrate																				15757
18	Oxygen																				5.13
19																					
20	Thermal Feedrate																				
21	Estimated Firing Rate																				79.4
22																					
23	*Feedrate MTEC Calculations*																				
24	Ash		56.5		46.2										13.7		68.5		56.5		46.2
25	Chlorine		7440.0		6971.7										7459.7		6015.3		7440.0		6971.7
26																					
27	**712C11**		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
28																					
29	Feedstream Number						F6		F6		F6		F6		F7		F7		F7		F7
30	Feed Class						NG		NG		NG		NG		Total		Total		Total		Total
31	Feed Class 2		HW		HW		MF		MF		MF		MF		Total		Total		Total		Total
32	Feedstream Description						Natural Gas		Natural Gas		Natural Gas		Natural Gas		Total		Total		Total		Total
33	Feed Rate														159.5		159.5		159.7		159.6
34	Feed Rate						18.8		19.6		19.2		19.2								
35	Density																				
36	Heating Value																				
37	Ash														52.6		62.4		32.5		49.2
38	Chlorine														5.4		5.0		3.8		4.7
39	Chromium																				
40	Antimony																				
41	Arsenic																				
42	Barium																				
43	Beryllium																				
44	Cadmium																				
45	Lead																				
46	Mercury																				
47	Nickel																				
48	Selenium																				
49	Silver																				
50	Thallium																				
51																					
52	Stack Gas Flowrate																				15283
53	Oxygen																				3.9
54																					
55	Thermal Feedrate																				
56	Estimated Firing Rate																				83.0
57																					
58	*Feedrate MTEC Calculations*																				
59	Ash		64.3		97.3										104.1		123.4		64.3		97.3
60	Chlorine		7420.2		9306.5										10704.8		9794.6		7420.2		9306.5

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
61	Chromium		ug/dscm	100	5.76	100	3.45	100	3.06	100	4.1	100	10.26	100	10.28	100	10.39	100	10.3		2.30E-02		2.55E-02	
62	Antimony		ug/dscm	100	1.72	100	1.72	100	1.72	100	1.7	100	13.69	100	13.71	100	13.87	100	13.8		9.93E-03		1.57E-02	
63	Arsenic		ug/dscm		35.11		32.88		32.56		33.5		23.94		25.85		23.94		24.6		4.88E-02		4.07E-02	
64	Barium		ug/dscm		5.76		3.26		2.68		3.9	100	6.85	100	6.86	100	6.93	100	6.9	100	6.73E-03		8.43E-03	100
65	Beryllium		ug/dscm	100	0.38	100	0.38	100	0.38	100	0.4	100	3.43	100	3.43	100	3.46	100	3.4	100	5.67E-04	100	6.11E-04	100
66	Cadmium		ug/dscm	100	0.38	100	0.38	100	0.38	100	0.4	100	3.43	100	3.43	100	3.46	100	3.4	100	5.78E-04	100	6.51E-04	100
67	Lead		ug/dscm		5.38		5.19		5.00		5.2		12.46		6.86		6.93		8.8		1.77E-02		1.01E-02	100
68	Mercury		ug/dscm	100	7.49		7.10	100	6.91	67	7.2	100	0.71		0.69	100	0.67	67	0.7	100	1.27E-02	100	1.09E-02	100
69	Nickel		ug/dscm		2.68		1.72		1.34		1.9	100	10.26		12.37	100	10.39	63	11.0	100	1.25E-02	100	1.39E-02	100
70	Selenium		ug/dscm		85.86		82.03		80.12		82.7		105.65		58.89		104.22		89.6		1.66E-01		1.61E-01	
71	Silver		ug/dscm	100	0.77	100	0.77	100	0.77	100	0.8	100	6.85	100	6.86	100	6.93	100	6.9	100	1.14E-03	100	1.23E-03	100
72	Thallium		ug/dscm	100	1.34	100	1.34	100	1.34	100	1.3	100	17.08	100	17.08	100	17.40	100	17.2	100	1.71E-03	100	1.84E-03	100
73																								
74	SVM		ug/dscm	6.65	5.76	6.9	5.57	7.1	5.38	7	5.6	22	15.90	33	10.29	33	10.39	28	12.2	3	1.83E-02	6	1.08E-02	15
75	LVM		ug/dscm	14.9	41.26	10	36.71	9.6	36.00	12	38.0	36	37.63	35	39.56	37	37.79	36	38.3	1	7.24E-02	1	6.68E-02	1

	B	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV
61	Chromium	2.68E-02		2.5E-02		1.69E+00		2.09E+00		1.61E+00		1.80E+00		2.11E-01		1.66E-01		1.64E-01		1.80E-01	89	17.9	86	16.0
62	Antimony	1.09E-02		1.2E-02		9.14E-01		6.48E-01		1.28E+00		9.49E-01		9.07E-02		9.75E-02		5.87E-02		8.23E-02	94	16.4	95	16.2
63	Arsenic	3.65E-02		4.2E-02		5.22E-01		2.43E-01	100	3.16E-01	29	3.60E-01		8.16E-02		1.03E-01		7.69E-02		8.72E-02		59.7		59.1
64	Barium	1.12E-02	68	8.8E-03		5.81E-01		6.50E-01		7.23E-01		6.51E-01	100	6.62E-02	100	4.74E-02	100	5.86E-02	100	5.74E-02	52	13.3	64	10.8
65	Beryllium	6.13E-04	100	6.0E-04	100	3.03E-02	100	3.22E-02	100	3.21E-02	100	3.15E-02	100	3.93E-03	100	4.55E-03	100	3.69E-03	100	4.05E-03	100	3.8	100	3.9
66	Cadmium	1.09E-03	100	7.7E-04	100	9.53E-02	100	4.02E-02	100	1.96E-01	100	1.11E-01	100	3.93E-03	100	4.55E-03	100	3.69E-03	100	4.05E-03	100	3.9	100	3.9
67	Lead	6.35E-03	19	1.1E-02		1.05E+00	100	2.06E-01		2.89E-01	13	5.14E-01	100	1.08E-02	100	2.63E-02	100	1.49E-02	100	1.74E-02		18.9	2	12.3
68	Mercury	1.18E-02	100	1.2E-02	100	6.46E-01	100	6.11E-01	100	6.30E-01	100	6.29E-01	100	7.96E-02	100	5.04E-02	100	5.22E-02	100	6.08E-02	100	8.9	8	8.5
69	Nickel	1.39E-02	100	1.3E-02		9.74E-01		1.99E+00		1.88E+00		1.62E+00	100	8.62E-02	100	1.90E-01	100	7.90E-02	100	1.18E-01	74	14.0	1	16.3
70	Selenium	1.20E-01		1.5E-01		4.25E+00		1.50E+00		1.14E+00		2.30E+00		3.11E-01		3.29E-01		2.59E-01		3.00E-01		196.2		142.9
71	Silver	1.23E-03	100	1.2E-03	100	7.76E-02	100	1.01E-01	100	8.39E-02	100	8.74E-02	100	7.90E-03	100	9.08E-03	100	7.37E-03	100	8.12E-03	100	7.7	100	7.7
72	Thallium	1.84E-03	100	1.8E-03	100	9.11E-02	100	9.69E-02	100	9.66E-02	100	9.49E-02	100	1.18E-02	100	1.36E-02	100	1.11E-02	100	1.22E-02	100	18.5	100	18.5
73																								
74	SVM	7.45E-03	6	1.2E-02	8	1.14E+00	100	2.46E-01	40	4.85E-01	29	6.24E-01	100	1.47E-02	100	3.09E-02	100	1.86E-02	100	2.14E-02	17	22.8	25	16.2
75	LVM	6.40E-02	1	6.8E-02	1	2.24E+00	1	2.37E+00	18	1.96E+00	6	2.19E+00	1	2.96E-01	2	2.74E-01	2	2.45E-01	1	2.72E-01	24	81.5	22	79.0

	B	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP
61	Chromium	88	15.3	88	16.4									89	17.9	86	16.0	88	15.3	88	16.4
62	Antimony	92	16.9	94	16.5									94	16.4	95	16.2	92	16.9	94	16.5
63	Arsenic	1	56.9		58.6										59.7		59.1	1	56.9		58.6
64	Barium	67	10.4	60	11.5									52	13.3	64	10.8	67	10.4	60	11.5
65	Beryllium	100	3.9	100	3.9									100	3.8	100	3.9	100	3.9	100	3.9
66	Cadmium	100	4.0	100	3.9									100	3.9	100	3.9	100	4.0	100	3.9
67	Lead		12.2	1	14.5										18.9	2	12.3		12.2	1	14.5
68	Mercury	100	8.3	70	8.6									100	8.9	8	8.5	100	8.3	70	8.6
69	Nickel	76	13.7	48	14.7									74	14.0	1	16.3	76	13.7	48	14.7
70	Selenium		185.9		175.0										196.2		142.9		185.9		175.0
71	Silver	100	7.8	100	7.7									100	7.7	100	7.7	100	7.8	100	7.7
72	Thallium	100	18.8	100	18.6									100	18.5	100	18.5	100	18.8	100	18.6
73																					
74	SVM	25	16.3	22	18.4									17	22.8	25	16.2	25	16.3	22	18.4
75	LVM	23	76.1	23	78.8									24	81.5	22	79.0	23	76.1	23	78.8

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	**Feedstream 2**																			
2																				
3																				
4	**712C1**				R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg	
5																				
6	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2	
7	Feed Class				Gaseous HW		Gaseous HW		Gaseous HW		Gaseous HW		Total		Total		Total		Total	
8	Feed Class 2				HW		HW		HW		HW		Total		Total		Total		Total	
9	Feedstream Description				Waste fumes		Waste fumes		Waste fumes		Waste fumes		Total		Total		Total		Total	
10	Feedrate		lb/hr																	
11	Heating value		Btu/lb																	
12	Ash		lb/hr		3.71				5.13											
13																				
14	Arsenic		lb/hr	1	0.000026			1	0.000024											
15	Beryllium		lb/hr	1	0.000003			1	0.000002											
16	Cadmium		lb/hr		0.000024			1	0.000010											
17	Chromium		lb/hr		0.000123		0.0000697		0.000067											
18	Chromium (Hex)		lb/hr		0.000069		0.0000697		0.000051											
19	Nickel		lb/hr		0.000605				0.000092											
20																				
21	Stack gas flowrate				21542		20654		21384											
22	Oxygen				5.2		5.1		5.1											
23																				
24	**Feedrate MTEC Calculations**																			
25	Ash		mg/dscm		40.80				56.48		49		40.80				56.48		48.64	
26																				
27	Arsenic		ug/dscm	100	0.3			100	0.3		0.3	100	0.29			100	0.26	67	0.28	
28	Beryllium		ug/dscm	100	0.0			100	0.0		0.0	100	0.03			100	0.03	133	0.01	
29	Cadmium		ug/dscm		0.3			100	0.1		0.2		0.26			100	0.11	22	0.16	
30	Chromium		ug/dscm		1.4		0.8		0.7		1.0		1.35		0.79		0.74		0.96	
31	Chromium (Hex)		ug/dscm		0.8		0.8		0.6		0.7		0.76		0.79		0.56		0.70	
32	Nickel		ug/dscm		6.7				1.0		3.8		6.65				1.02		3.83	
33																				
34	SVM		ug/dscm		0.3			100	0.1		0.2		0.26		0.00	100	0.11	19	0.18	(Cd only)
35	LVM		ug/dscm		1.5		0.8	28.06	1.0		1.1		1.51		0.79	###	1.03	8.7	1.11	
36																				
37																				
38	**712C2**				R1		R1													
39																				
40	Feedstream Number				F1		F2													
41	Feed Class				Gaseous HW		Total													
42	Feed Class 2				HW		Total													
43	Feedstream				Waste fumes		Total													
44	Feedrate		lb/hr																	
45	Heating value		Btu/lb																	
46	Ash																			
47	Antimony		lb/hr	1	0.0000264															
48	Arsenic		lb/hr	1	0.0000264															
49	Barium		lb/hr		0.0000481															
50	Beryllium		lb/hr	1	0.00000527															
51	Cadmium		lb/hr	1	0.0000264															
52	Chromium		lb/hr		0.000142															
53	Chromium (Hex)		lb/hr	1	0.0000152															
54	Lead		lb/hr		0.0000361															
55	Mercury		lb/hr	1	0.0000403															
56	Nickel		lb/hr		0.000146															
57	Selenium		lb/hr	1	0.0000264															
58	Silver		lb/hr	1	0.0000264															
59	Thallium		lb/hr	1	0.0000264															
60																				

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
61																				
62	Stack gas flowrate				16819															
63	Oxygen				5.1															
64																				
65	**Feedrate MTEC Calculations**																			
66																				
67	Antimony		ug/dscm	100	0.37	100	0.37													
68	Arsenic		ug/dscm	100	0.37	100	0.37													
69	Barium		ug/dscm		0.67		0.67													
70	Beryllium		ug/dscm	100	0.07	100	0.07													
71	Cadmium		ug/dscm	100	0.37	100	0.37													
72	Chromium		ug/dscm		1.99		1.99													
73	Chromium (Hex)		ug/dscm	100	0.21	100	0.21													
74	Lead		ug/dscm		0.51		0.51													
75	Mercury		ug/dscm	100	0.56	100	0.56													
76	Nickel		ug/dscm		2.04		2.04													
77	Selenium		ug/dscm	100	0.37	100	0.37													
78	Silver		ug/dscm	100	0.37	100	0.37													
79	Thallium		ug/dscm	100	0.37	100	0.37													
80																				
81	SVM		ug/dscm	42	0.87	42	0.87													
82	LVM		ug/dscm	18	2.43	18	2.43													

	B	C	D	E	F	G
1	**Process Information**					
2						
3	**712C10**			Run 1	Run 2	Run 3
4						
5	Chamber Temp	oC		1030	1030	1030
6	Chamber Press.	mbar		8.75	9.24	8.9
7	Atomization Gas Press to Waste Water	bar		3.5	3.5	3.51
8	Atomization Gas Press to Front	bar		4.4	4.5	4.5
9						
10						
11	**712C11**			Run 1	Run 2	Run 3
12						
13	Chamber Temp	oC		1150	1148	1150
14	Chamber Press.	mbar		7.69	7.4	7.55
15	Atomization Gas Press to Waste Water	bar		3.53	3.5	3.51
16	Atomization Gas Press to Front	bar		4.54	4.32	4.44

PCDD/PCDF

N

Facility Name and ID: Nepera Incorporated

Condition ID: 712C10

Condition/Test Date: Trial burn, max feedrate, low temp

	I-TEF			Run 1				Run 2					Run 3			
	Wght Fact		Total Full ND	TEQ Full ND	Total 1/2 ND	TEQ 1/2 ND		Total Full ND	TEQ Full ND	Total 1/2 ND	TEQ 1/2 ND		Total Full ND	TEQ Full ND	Total 1/2 ND	TEQ 1/2 ND
Detected in sample volume (ng)																
2,3,7,8-TCDD	1		0.019	0.02	0.019	0.02		0.123	0.12	0.123	0.12		0.006	0.006	0.006	0.006
Total TCDD	0		0.392	0.00	0.392	0.00		0.799	0.00	0.799	0.00		0.049	0.000	0.049	0.000
1,2,3,7,8-PCDD	0.5		0.084	0.04	0.084	0.04		0.374	0.19	0.374	0.19		0.032	0.016	0.032	0.016
Total PCDD	0		1.091	0.00	1.091	0.00		1.748	0.00	1.748	0.00		0.201	0.000	0.201	0.000
1,2,3,4,7,8-HxCDD	0.1		0.160	0.02	0.160	0.02		0.355	0.04	0.355	0.04		0.045	0.004	0.045	0.004
1,2,3,6,7,8-HxCDD	0.1		0.293	0.03	0.293	0.03		0.489	0.05	0.489	0.05		0.055	0.006	0.055	0.006
1,2,3,7,8,9-HxCDD	0.1		0.331	0.03	0.331	0.03		0.570	0.06	0.570	0.06		0.065	0.006	0.065	0.006
Total HxCDD	0		2.257	0.00	2.257	0.00		3.265	0.00	3.265	0.00		0.394	0.000	0.394	0.000
1,2,3,4,6,7,8-HpCDD	0.01		3.123	0.03	3.123	0.03		5.960	0.06	5.960	0.06		0.375	0.004	0.375	0.004
Total HpCDD	0		2.298	0	2.298	0		4.528	0.00	4.528	0.00		0.301	0.000	0.301	0.000
OCDD	0.001		7.210	0.01	7.210	0.01		20.205	0.02	20.205	0.02		0.698	0.001	0.698	0.001
2,3,7,8-TCDF	0.1		0.097	0.01	0.097	0.01		0.428	0.04	0.428	0.04		0.029	0.003	0.029	0.003
Total TCDF	0		2.470	0	2.470	0		6.964	0.00	6.964	0.00		0.503	0.000	0.503	0.000
1,2,3,7,8-PCDF	0.05		0.255	0	0.255	0		0.886	0.04	0.886	0.04		0.062	0.003	0.062	0.003
2,3,4,7,8-PCDF	0.5		0.421	0	0.421	0		0.818	0.41	0.818	0.41		0.112	0.056	0.112	0.056
Total PCDF	0		2.671	0	2.671	0		6.607	0.00	6.607	0.00		0.688	0.000	0.688	0.000
1,2,3,4,7,8-HxCDF	0.1		1.197	0	1.197	0		2.225	0.22	2.225	0.22		0.370	0.037	0.370	0.037
1,2,3,6,7,8-HxCDF	0.1		0.515	0	0.515	0		1.036	0.10	1.036	0.10		0.143	0.014	0.143	0.014
2,3,4,6,7,8-HxCDF	0.1		0.098	0	0.098	0		0.094	0.01	0.094	0.01		0.017	0.002	0.017	0.002
1,2,3,7,8,9-HxCDF	0.1		0.690	0	0.690	0		0.929	0.09	0.929	0.09		0.018	0.002	0.018	0.002
Total HxCDF	0		2.307	0	2.307	0		4.348	0.00	4.348	0.00		0.651	0.000	0.651	0.000
1,2,3,4,6,7,8-HpCDF	0.01		1.810	0	1.810	0		3.153	0.03	3.153	0.03		0.462	0.005	0.462	0.005
1,2,3,4,7,8,9-HpCDF	0.01		0.609	0	0.609	0		0.538	0.01	0.538	0.01		0.082	0.001	0.082	0.001
Total HpCDF	0		0.992	0	0.992	0		1.244	0.00	1.244	0.00		0.159	0.000	0.159	0.000
OCDF	0.001		2.540	0	2.540	0		2.685	0.00	2.685	0.00		0.240	0.000	0.240	0.000
Gas sample volume (dscf)				122.07	122.07	122.07			110.84	110.84	110.84			110.10	110.10	110.10
O2 (%)				5.20	5.20	5.20			5.0	5.0	5.0			5.20	5.20	5.20
PCDD/PCDF (ng in sample)				0.69	24.2	0.69			1.50	52.4	1.50			0.17	3.9	0.17
PCDD/PCDF (ng/dscm @ 7% O2		0.0		0.1762	6.21	0.1762	0.0		0.4171	14.61	0.4171	0.0		0.0471	1.10	0.0471
TEQ Cond Avg	0.213															
Total Cond Avg	7.3															