

US EPA ARCHIVE DOCUMENT

Data Summary: HCl Production Furnaces, Particulate Matter

	1	2	3	4	5	6	8	13	15	16	17	18	19
2	Source ID	Cond ID	Facility Information		Combustor Information		APCS Detailed Acronym	Hazardous Wastes	Munitions Popping Furnace	Chemical Weapons Demil	Mixed Radioactive Waste	Comm vs On-site	Gov't
3	Number	Number	Facility Name	City	Combustor Category	Combustor Class							
4													
5													
6	2005	2005C1	Vulcan Materials Co.	Geismar	HCl production furnace	HCl Production Furnace	WHB/QT/WS	Liq	No	No	No	OS	No
7	2005	2005C2	Vulcan Materials Co.	Geismar	HCl production furnace	HCl Production Furnace	WHB/QT/WS	Liq	No	No	No	OS	No
8	2005	2005C3	Vulcan Materials Co.	Geismar	HCl production furnace	HCl Production Furnace	WHB/QT/WS	Liq	No	No	No	OS	No
9	2005	2005C4	Vulcan Materials Co.	Geismar	HCl production furnace	HCl Production Furnace	WHB/QT/WS	Liq	No	No	No	OS	No
10	2018	2018C3	Dow Chemical Company	Freeport	HCl production furnace	HCl Production Furnace	WHB/VS/Q/HCLABS/VS/CLWS	Liq	No	No	No	OS	No
11	2022	2022C1	PPG Industries, Inc.	Lake Charles	HCl production furnace	HCl Production Furnace	WHB, WS	Liq	No	No	No	OS	No
12	2022	2022C2	PPG Industries, Inc.	Lake Charles	HCl production furnace	HCl Production Furnace	WHB, WS	Liq	No	No	No	OS	No
13	2022	2022C3	PPG Industries, Inc.	Lake Charles	HCl production furnace	HCl Production Furnace	WHB, WS	Liq	No	No	No	OS	No
14	785	785C1	Borden Chemicals and Plastics (BCP)	Geismar	HCl production furnace	HCl Production Furnace	GC/HE/QC/AT/WS	Liq	No	No	No	OS	No
15	785	785C2	Borden Chemicals and Plastics (BCP)	Geismar	HCl production furnace	HCl Production Furnace	GC/HE/QC/AT/WS	Liq	No	No	No	OS	No
16	785	785C3	Borden Chemicals and Plastics (BCP)	Geismar	HCl production furnace	HCl Production Furnace	GC/HE/QC/AT/WS	Liq	No	No	No	OS	No
17	788	788C1	Dow Chemical Company	Freeport	HCl production furnace	HCl Production Furnace	MGCLREC/VS/SEP/DM	Liq	No	No	No	OS	No
18	845	845C1	Dow Chemical Company	Freeport	HCl production furnace	HCl Production Furnace	WHB/Q/HCLABS/VS/WS	Liq	No	No	No	OS	No
19	851	851C1	The Dow Chemical Company	Pittsburg	HCl production furnace	HCl Production Furnace	Q/HCIABS/WS	Liq	No	No	No	OS	No
20	851	851C3	The Dow Chemical Company	Pittsburg	HCl production furnace	HCl Production Furnace	Q/HCIABS/WS	Liq	No	No	No	OS	No
21	853	853C10	Dupont Dow Elastomers	LaPlace	HCl production furnace	HCl Production Furnace	WQ/3STGHCIABS/S/CWS	Liq	No	No	No	OS	No
22	853	853C11	Dupont Dow Elastomers	LaPlace	HCl production furnace	HCl Production Furnace	WQ/3STGHCIABS/S/CWS	Liq	No	No	No	OS	No
23	853	853C12	Dupont Dow Elastomers	LaPlace	HCl production furnace	HCl Production Furnace	WQ/3STGHCIABS/S/CWS	Liq	No	No	No	OS	No
24	854	854C1	Eastman Chemical Company, Longview, Longview	Longview	HCl production furnace	HCl Production Furnace	QT/ABS/WS	Liq	No	No	No	OS	No
25	854	854C2	Eastman Chemical Company, Longview, Longview	Longview	HCl production furnace	HCl Production Furnace	QT/ABS/WS	Liq	No	No	No	OS	No
26	855	855C11	Georgia Gulf Chemicals and Vinyls, LLC	Plaquemine	HCl production furnace	HCl Production Furnace	WHB/4STGHCIABS/CWS	Liq	No	No	No	OS	No
27	855	855C12	Georgia Gulf Chemicals and Vinyls, LLC	Plaquemine	HCl production furnace	HCl Production Furnace	WHB/4STGHCIABS/CWS	Liq	No	No	No	OS	No
28	855	855C13	Georgia Gulf Chemicals and Vinyls, LLC	Plaquemine	HCl production furnace	HCl Production Furnace	WHB/4STGHCIABS/CWS	Liq	No	No	No	OS	No
29													
30													
31	Sources Shutdown or No Longer Burning Hazardous Wastes												
32	2017	2017C1	Dow Chemical Company	Freeport	HCl production furnace	HCl Production Furnace	WHB/Q/HCIABS/VE/CLWS	Liq	No	No	No	OS	No
33	2017A	2017C1	Dow Chemical Company	Freeport	HCl production furnace	HCl Production Furnace	WHB/Q/HCIABS/VE/CLWS	Liq	No	No	No	OS	No
34	2020	2020C1	Dow Chemical Company	Freeport	HCl production furnace	HCl Production Furnace	WHB/VS/WS	Liq	No	No	No	OS	No
35	786	786C1	Dow Chemical Company	Freeport	HCl production furnace	HCl Production Furnace	DQ/HCLABS/VS/CLWS	Liq	No	No	No	OS	No
36	842	842C1	Dow Chemical Company	Freeport	HCl production furnace	HCl Production Furnace	WHB/HCLABS/WS	Liq	No	No	No	OS	No
37	844	844C4	Dow Chemical Company	Freeport	HCl production furnace	HCl Production Furnace	WHB/HCLABS/WS	Liq	No	No	No	OS	No
38	848	848C1	Dow Chemical Company	Freeport	HCl production furnace	HCl Production Furnace	WHB/HCIABS/CWS	Liq	No	No	No	OS	No

Data Summary: HCI Production Furnaces, Particulate Matter

	2	20	21	22	30	31	32	33	34	36	38	57	58	61	62	63
2	Cond ID	Condition Information			Ash	PM Emissions			PM Stack Emission (gr/dscf)					Ash SRE		
3	Number	Cond Description			Spiking	Campaign	Rating	Comments	R1	R2	R3	Cond Avg		Camp	Rating	Comment
4	Dates					Number			ND	Emiss	Emiss	Emiss	ND	Emiss	Number	
5																
6	2005C1	2/1/1990	Trial burn -- max hex feed to burner No. 1 only		L		1 IB		0.006	0.006	0.005		0.006		1 IB	
7	2005C2	2/1/1990	Trial burn -- max D-40 groundwater phase feed to burner No. 2 only		L		1 IB		0.001	0.003	0.002		0.002		1 IB	
8	2005C3	2/1/1990	Trial burn -- similar to cond 1 but at lower feedrate		L		1 IB		0.002	0.003	0.003		0.002		1 IB	
9	2005C4	2/1/1990	Trial burn -- operation with both feeds and both burners		L		1 CT		0.010	0.005	0.005		0.007		1 CT	
10	2018C3	1/1/1997	COC burn, max waste feed and production rate, max comb temp, min APCS				1 CT		0.006	0.002	0.006		0.005		1 CT	
11	2022C1	5/1/2001	Trial burn, min comb temp		N		1 CT		0.009	0.008	0.010		0.009		1 CT	
12	2022C2	5/1/2001	Trial burn, increased PCB feed rate		N		1 IB		0.006	0.007	0.006		0.006		1 IB	
13	2022C3	5/1/2001	Normal comb temp		N		1 IB		0.008	0.008	0.009		0.008		1 IB	
14	785C1	4/1/1998	CoC; Low scrubber pH		U		1 CT		0.005	0.004	0.004		0.005		1 IB	
15	785C2	4/1/1998	CoC; High scrubber pH		U		1 IB		0.004	0.004	0.004		0.004		1 IB	
16	785C3	4/1/1998	CoC; Lower scrubber recirculation rate, low scrubber pH		U		1 IB		0.004	0.004	0.005		0.004		1 CT	
17	788C1	11/1/1997	Trial burn, max feed rate and comb temp		Y		1 CT		0.003	0.004	0.004		0.004		1 CT	
18	845C1	4/1/1998	Trial burn, max waste feed rate, max ash and Cr		Y		1 CT		0.001	0.002	0.002		0.002		1 CT	
19	851C1	10/31/1995	Trial burn, max comb chamber temp		Y		1 CT		0.011	0.010	0.012		0.011		1 CT	
20	851C3	9/30/1995	Risk burn, normal operating conditions		N		1 N		0.001	0.000	0.001		0.000			
21	853C10	4/1/1997	Risk burn, normal operating cond		N		1 N		0.003	0.005	0.004		0.004		1 N	
22	853C11	4/1/1997	Trial burn test		U		1 IB		0.008	0.011	0.008		0.009		1 IB	
23	853C12	9/1/1997	Supplemental trial burn test		U		1 CT		0.047	0.044	0.038		0.043		1 CT	
24	854C1	6/1/1998	Trial burn, worst case for organics destruction		Y		1 CT		0.000	0.001	0.001		0.001		1 CT	
25	854C2	9/1/1996	CoC, max waste, metals, Cl, prod rate		U		2 NA	NE; only considerir	0.004	0.002	0.000		0.002		2 CT	
26	855C11	4/1/1995	Louisiana Air Permit Compliance Testing		U		1 CT		0.016	0.012	0.010		0.013			
27	855C12	3/1/1990	Trial burn -- Heavy liquid and wet/dry vent streams				2 NA	NE; only considerir	0.021	0.009	0.009		0.013		1 IB	
28	855C13	3/1/1990	Trial burn -- Heavy liquid and wet/dry vent streams				2 NA	NE; only considerir	0.013	0.014	0.016		0.014		1 CT	
29																
30																
31	shutdown or															
32	2017C1	2/1/1998	Trial burn, max prod rate, min APCS, max waste feed rate		Y		1 CT		0.005	0.006	0.007		0.006		1 CT	
33	2017C1	2/1/1998	Trial burn, max prod rate, min APCS, max waste feed rate		Y		1 NA	Data in lieu	0.005	0.006	0.007		0.006		1 NA	Data in lieu
34	2020C1	2/1/1999	Trial burn, max waste feed, max op temp and prod rate, min APCS dP		Y		1 CT		0.009	0.008	0.008		0.009		1 CT	
35	786C1	8/1/1998	Trial burn, max waste feed and prod rate, max comb temp, min APCS		Y		1 CT		0.008	0.007	0.007		0.007		1 CT	
36	842C1	5/1/1998	Trial burn, max prod rate, min APCS, thermal capacity, max waste feed rate		Y		1 CT		0.006	0.007	0.008		0.007		1 CT	
37	844C4	4/1/1997	COC burn, max waste feed and production rate, max comb temp, min APCS				1 CT		0.014	0.013	0.003		0.010		1 CT	
38	848C1	6/1/1998	Trial burn, max waste feed rate and comb temp, min APCS		Y		1 CT		0.003	0.003	0.003		0.003		1 CT	

Data Summary: HCl Production Furnaces, Particulate Matter

2	64	65	66	67	68	69	82	83	108	109	110	113	114	115	116	117	118	119	138	139
2	Cond ID	Ash SRE (%)						Ash Feedrate, Cond Avg (mg/dscm)				Ash Total Feedrate (mg/dscm) - By Runs								
3	Number	R1	R2	R3	Cond Avg	HW	Spike	RM	Total	ND	R1	ND	R2	ND	R3	ND	Cond Avg			
4																				
5																				
6	2005C1	84.823			85.236	90.5			90.5		89		0		0		91			
7	2005C2	91.094			86.468	32.8			32.8		34		0		0		33			
8	2005C3		92.538		93.124	81.1			81.1		0		78		0		81			
9	2005C4		78.592		69.643	25.6		24.1	49.6		0		52		0		50			
10	2018C3	71.816	89.819	72.561	77.293	1.8	45.4		47.1		48		44		49		47			
11	2022C1				35.771	31.4			31.4								31			
12	2022C2				40.787	24.9			24.9								25			
13	2022C3				38.418	29.4			29.4								29			
14	785C1	63.235	77.602	82.937	76.105	43.8			43.8		31		44		57		44			
15	785C2	79.034	66.332	81.459	76.570	38.8			38.8		44		27		45		39			
16	785C3	49.841	43.377	76.831	63.652	24.8			24.8		16		15		44		25			
17	788C1	99.887	99.875	99.878	99.876	36.2	7,000.5		7,047.2	0	6,753	0	7,378	0	7,010	0	7,047			
18	845C1	94.066	92.136	92.259	92.670	10.0	36.9		46.9		46		52		44		47			
19	851C1 >	94.974 >	95.140 >	93.789 >	94.553	9.6	377.9		473.7	2	489	2	477	2	455	2	474			
20	851C3					7.6			3.8	100	8	100	7	100	8	100	4			
21	853C10	67.857	63.937	76.106	69.280	28.1			28.1		22		29		34		28			
22	853C11	72.291	56.932	72.945	67.206	60.8			60.8		61		56		66		61			
23	853C12	-78.943	-69.922	-28.190	-60.612	61.5			61.5		60		58		67		62			
24	854C1 >	99.474 >	98.949 >	98.964 >	99.122	35.9	174.1		210.0	17	222	17	212	17	197	17	210			
25	854C2	72.074	84.769	99.148	84.508	28.6			28.6		28		33		26		29			
26	855C11																			
27	855C12	45.070	83.915	83.776	73.434	111.0			111.0		85		122		126		111			
28	855C13	70.759	72.055	74.801	72.280	116.3			116.3	0	101		110		138		116			
29																				
30																				
31	shutdown or																			
32	2017C1	99.192	99.008	98.974	99.042	5.8	1,453.6		1,459.4		1,505		1,452		1,448		1,459			
33	2017C1	99.192	99.008	98.974	99.042	5.8	1,453.6		1,459.4		1,505		1,452		1,448		1,459			
34	2020C1	59.682	59.628		64.125	14.1	40.2		54.3		52		46		60		54			
35	786C1	90.401	90.576	90.843	90.451	13.1	159.8		172.8	0	176	0	172	0	172	0	173			
36	842C1	80.999	81.673	74.239	78.723	6.1	69.0		75.0		76		80		70		75			
37	844C4	43.141	37.232	83.167	51.650	2.9	44.4		47.4		55		47		40		47			
38	848C1	86.093	85.691	87.500	86.050	0.8			46.0	0	45	0	46	0	47	0	46			