EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr(4)	TPY(5)
Case 1: Firing natural gas and supplemental hydrocarbon fuel (EPNs B-C-9A, B-C-9B, A-C-OA/OB/OC only) 8,760 hrs/yr:				
B-C-8A	42 MMBtu/hr Process Heater	NOx	5.15	22.57
		CO	1.29	5.64
		SO2	0.02	0.10
		PM10	0.18	0.81
		VOC	0.10	0.45
B-C-8B	42 MMBtu/hr Process Heater	NOx	5.15	22.57
		CO	1.29	5.64
		SO2	0.02	0.10
		PM10	0.18	0.81
		VOC	0.10	0.45
B-C-8C	31 MMBtu/hr Process	NOx	3.74	16.39
		CO	0.94	4.10
		SO2	0.02	0.07
		PM10	0.13	0.59
		VOC	0.07	0.33
B-C-8D	31 MMBtu/hr Process	NOx	3.74	16.39
		CO	0.94	4.10
		SO2	0.02	0.07
		PM10	0.13	0.59
		VOC	0.07	0.33
B-C-8E	34 MMBtu/hr Process	NOx	4.17	18.25
		CO	1.04	4.56
		SO2	0.02	0.08
		PM10	0.15	0.65
		VOC	0.08	0.37
B-C-9A	69 MMBtu/hr Dowtherm	NOx	8.89	38.95

CO	2.22	9.74
		SO2
		0.04
		0.16
PM10	0.32	1.39
VOC	0.18	0.78

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr(4)	TPY(5)
B-C-9B	69 MMBtu/hr Dowtherm	NOx	8.89	38.95
		CO	2.22	9.74
				SO2
				0.04
				0.16
		PM10	0.32	1.39
		VOC	0.18	0.78
A-C-OA/OB/OC(5)	130 MMBtu/hr Dowtherm	NOx	15.77	69.07
		CO	3.94	17.27
		SO2	0.07	0.30
		PM10	0.56	2.47
		VOC	0.32	1.38
C-C-1A/1B (5)	14 MMBtu/hr Aluminum Melt	NOx	1.52	6.67
		CO	0.38	1.67
		SO2	0.01	0.03
				PM10
	0.05	0.24		
		VOC	0.03	0.13
C-C-1C/1D (5)	14 MMBtu/hr Aluminum Melt	NOx	1.52	6.67
		CO	0.38	1.67
		SO2	0.01	0.03
		PM10	0.05	0.24
		VOC	0.03	0.13
Case 2: Waste liquid fuel firing 168 hours per year:				
B-C-8A	42 MMBtu/hr Process Heater	NOx	44.16	3.71
		CO	1.84	0.15
		PM10	0.74	0.06
		VOC	0.07	0.01

B-C-8B	42 MMBtu/hr Process Heater	NOx	44.16	3.71
		CO	1.84	0.15
		PM10	0.74	0.06
		VOC	0.07	0.01
B-C-8C	31 MMBtu/hr Process	NOx	32.06	2.69
		CO	1.34	0.11
		PM10	0.53	0.04
		VOC	0.05	0.01
B-C-8D	31 MMBtu/hr Process	NOx	32.06	2.69
		CO	1.34	0.11
		PM10	0.53	0.04
		VOC	0.05	0.01

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr(4)	TPY(5)
B-C-8E	34 MMBtu/hr Process	NOx	35.71	3.00
		CO	1.49	0.13
		PM10	0.60	0.05
		VOC	0.06	0.01
B-C-9A	69 MMBtu/hr Dowtherm	NOx	72.22	6.07
		CO	3.17	0.27
		PM10	1.27	0.11
		VOC	0.13	0.01
B-C-9B	69 MMBtu/hr Dowtherm	NOx	72.22	6.07
		CO	3.17	0.27
		PM10	1.27	0.11
		VOC	0.13	0.01
A-C-OA/OB/OC (5)	130 MMBtu/hr Dowtherm	NOx	135.17	11.35
		CO	5.63	0.47
		PM10	2.25	0.19
		VOC	0.23	0.02
C-C-1A/1B (5)	14 MMBtu/hr Aluminum Melt	NOx	13.06	1.10
		CO	0.54	0.05
		PM10	0.22	0.02
		VOC	0.02	0.10
C-C-1C/1D (5)	14 MMBtu/hr Aluminum Melt	NOx	13.06	1.10
		CO	0.54	0.05
		PM10	0.22	0.02
		VOC	0.02	0.10
Case 3: No.4 fuel oil firing 336 hours per year:				
B-C-8A	42 MMBtu/hr Process Heater	NOx	7.36	1.24
		CO	1.84	0.31
		PM10	2.58	0.43
		VOC	0.07	0.01
		SO2	15.68	2.63
		SO3	0.22	0.04
B-C-8B	42 MMBtu/hr Process	NOx	7.36	1.24

Heater	CO	1.84	0.31
	PM10	2.58	0.43
	VOC	0.07	0.01
	SO2	15.68	2.63
	SO3	0.22	0.04

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr(4)	TPY(5)
B-C-8C	31 MMBtu/hr Process Heater	NOx	5.34	0.90
		CO	1.34	0.23
		PM10	1.87	0.31
		VOC	0.05	0.01
		SO2	11.38	1.91
		SO3	0.16	0.03
B-C-8D	31 MMBtu/hr Process Heater	NOx	5.34	0.90
		CO	1.34	0.23
		PM10	1.87	0.31
		VOC	0.05	0.01
		SO2	11.38	1.91
		SO3	0.16	0.03
B-C-8E	34 MMBtu/hr Process Heater	NOx	5.95	1.00
		CO	1.49	0.25
		PM10	2.08	0.35
		VOC	0.06	0.01
		SO2	12.68	2.13
		SO3	0.18	0.03
B-C-9A	69 MMBtu/hr Dowtherm	NOx	12.70	2.13
		CO	3.18	0.53
		PM10	4.60	0.77
		VOC	0.13	0.02
		SO2	25.36	4.26
		SO3	0.36	0.06
B-C-9B	69 MMBtu/hr Dowtherm	NOx	12.70	2.13
		CO	3.18	0.53
		PM10	4.60	0.77
		VOC	0.13	0.02
		SO2	25.36	4.26
		SO3	0.36	0.06
A-C-OA/OB/OC (5)	130 MMBtu/hr Dowtherm	NOx	22.53	3.79
		CO	5.63	0.95
		PM10	7.89	1.32
		VOC	0.23	0.04
		SO2	47.98	8.06
		SO3	0.68	0.11
C-C-1A/1B (5)	14 MMBtu/hr Aluminum	NOx	2.18	0.37

Melt	CO	0.54	0.09
	PM10	0.76	0.13
	VOC	0.02	0.01
	SO2	4.63	0.78
	SO3	0.07	0.01

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr(4)	TPY(5)
C-C-1C/1D(5)	14 MMBtu/hr Aluminum Melt	NOx	2.18	0.37
		CO	0.54	0.09
		PM10	0.76	0.13
		VOC	0.02	0.01
		SO2	4.63	0.78
		SO3	0.07	0.01

Case 4: Firing a combination of natural gas and supplemental hydrocarbon fuel (EPNs B-C-9A, B-C-9B, A-C-OA/OB/OC only) 8,256 hrs/yr, waste liquid fuel 168 hrs/yr, and No. 4 fuel oil 336 hrs/yr:

B-C-8A	42 MMBtu/hr Process Heater	NOx	44.16	26.21
		CO	1.84	5.78
		SO2	15.68	2.72
		SO3	0.22	0.04
		PM10	2.58	1.25
		VOC	0.10	0.44
B-C-8B	42 MMBtu/hr Process Heater	NOx	44.16	26.12
		CO	1.84	5.78
		SO2	15.68	2.72
		SO3	0.22	0.04
		PM10	2.58	1.25
		VOC	0.10	0.44
B-C-8C	31 MMBtu/hr Process	NOx	32.06	19.03
		CO	1.34	4.20
		SO2	11.38	1.98
		SO3	0.16	0.03
		PM10	1.87	0.91
		VOC	0.07	0.32
B-C-8D	31 MMBtu/hr Process	NOx	32.06	19.03
		CO	1.34	4.20
		SO2	11.38	1.98
		SO3	0.16	0.03
		PM10	1.87	0.91
		VOC	0.07	0.32
B-C-8E	34 MMBtu/hr Process	NOx	35.71	21.20
		CO	1.49	4.67
		SO2	12.68	2.20

SO3	0.18	0.03
PM10	2.08	1.01
VOC	0.08	0.36

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr(4)	TPY(5)
B-C-9A	69 MMBtu/hr Dowtherm	NOx	72.22	44.91
		CO	3.18	9.98
		SO2		25.36
		SO3	0.36	4.41
		PM10	4.60	0.06
		VOC	0.18	2.19
				0.77
B-C-9B	69 MMBtu/hr Dowtherm	NOx	72.22	44.91
		CO	3.18	9.98
		SO2		25.36
		SO3	0.36	4.41
		PM10	4.60	0.06
		VOC	0.18	2.19
				0.77
A-C-OA/OB/OC(5)	130 MMBtu/hr Dowtherm	NOx	135.17	80.24
		CO	5.63	17.69
		SO2	47.98	8.34
		SO3	0.68	0.11
		PM10	7.88	3.84
		VOC	0.32	1.36
C-C-1A/1B (5)	14 MMBtu/hr Aluminum Melt	NOx	13.06	7.75
		CO	0.54	1.71
		SO2	4.63	0.81
		SO3	0.07	0.01
		PM10	0.76	0.37
		VOC	0.03	0.13

C-C-1C/1D (5)	14 MMBtu/hr Aluminum Melt	NOx	13.06	7.75
		CO	0.54	1.71
		SO2	4.63	0.81
		SO3	0.07	0.01
		PM10	0.76	0.37
		VOC	0.03	0.13

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name.
(3) PM10 - particulate matter less than 10 microns
VOC - volatile organic compounds as defined in General Rule 101.1
NOx - total oxides of nitrogen
SO2 - sulfur dioxide
SO3 - sulfur trioxide
CO - carbon monoxide

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(4) See Special Provision No. 4 for basis for annual emission rates.
(5) These furnaces have multiple stacks on the same unit.

* The facilities are limited by the following maximum operating schedule:

Hrs/day___Days/week___Weeks/year___or Hrs/year 8,760

Revised_____