

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 22622

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	TPY
1A and 3	Incinerator/Waste Heat Boiler (5) 15.03 and Incinerator/Preheater 130.5 (Combined Annual Emissions) 25.94	PM ₁₀		
		SO ₂		
		NO _x		
		CO		37.87
		VOC		15.02
		H ₂ S		0.56
		HCl		1.35
		Benzene		7.80
		Ethyl Benzene		7.42
		HAPS		2.25
1A	Incinerator/Waste (5 and 6) Heat Boiler	PM ₁₀		1.53
		SO ₂	13.34	
		NO _x	2.61	
		CO	3.83	
		VOC	1.53	
		H ₂ S	0.057	
		HCl	0.138	
		Benzene	0.80	
		Ethyl Benzene	0.76	
		HAPS	0.23	
3	Incinerator/Preheater (5 and 6)	PM ₁₀	3.07	
		SO ₂	26.68	
		NO _x	5.31	
		CO	7.75	
		VOC	3.07	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
189	Boiler Stack (5)	H ₂ S	0.114	
		HCl	0.276	
		Benzene	1.59	
		Ethyl Benzene	1.52	
		HAPS	0.460	
		PM ₁₀	0.10	0.42
		SO ₂	0.008	0.033
		NO _x	1.26	5.52
		CO	1.06	4.64
		VOC	0.07	0.304
		HAPS	0.0012	<0.005
312	Preheater Stack (5)	PM ₁₀	0.038	0.167
		SO ₂	0.003	0.013
		NO _x	0.50	2.19
		CO	0.420	1.84
		VOC	0.028	0.121
		HAPS	0.00043	<0.002
221	Tank 1 Heater (5)	PM ₁₀	0.011	0.05
		SO ₂	0.001	0.004
		NO _x	0.150	0.657
		CO	0.130	0.552
		VOC	0.008	0.036
		HAPS	0.00013	<0.006
224	Tank 2 Heater (5)	PM ₁₀	0.011	0.05
		SO ₂	0.001	0.004
		NO _x	0.150	0.657
		CO	0.130	0.552
		VOC	0.008	0.036
		HAPS	0.00013	<0.006
227	Tank 3 Heater (5)	PM ₁₀	0.011	0.05
		SO ₂	0.001	0.004
		NO _x	0.150	0.657
		CO	0.130	0.552

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
		VOC	0.008	0.036
		HAPS	0.00013	<0.006
230	Tank 4 Heater (5)	PM ₁₀	0.011	0.05
		SO ₂	0.001	0.004
		NO _x	0.150	0.657
		CO	0.130	0.552
		VOC	0.008	0.036
		HAPS	0.00013	<0.006
233	Tank 6 Heater (5)	PM ₁₀	0.006	0.027
		SO ₂	0.0005	0.002
		NO _x	0.080	0.351
		CO	0.07	0.295
		VOC	0.004	0.020
		HAPS	0.00007	<0.001
236	Tank 13 Heater (5)	PM ₁₀	0.006	0.027
		SO ₂	0.0005	0.002
		NO _x	0.080	0.351
		CO	0.07	0.295
		VOC	0.004	0.020
		HAPS	0.00007	<0.001
239	Tank 14 Heater 1 (5)	PM ₁₀	0.019	0.083
		SO ₂	0.002	0.007
		NO _x	0.250	1.100
		CO	0.210	0.920
		VOC	0.014	0.06
		HAPS	0.00022	<0.001
240	Tank 14 Heater 2 (5)	PM ₁₀	0.019	0.083
		SO ₂	0.002	0.007
		NO _x	0.250	1.100
		CO	0.210	0.920

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
		VOC	0.014	0.06
		HAPS	0.00022	<0.001
243	Tank 15 Heater 1 (5)	PM ₁₀	0.019	0.083
		SO ₂	0.002	0.007
		NO _x	0.250	1.100
		CO	0.210	0.920
		VOC	0.014	0.06
		HAPS	0.00022	<0.001
244	Tank 15 Heater 2 (5)	PM ₁₀	0.019	0.083
		SO ₂	0.002	0.007
		NO _x	0.250	1.100
		CO	0.210	0.920
		VOC	0.014	0.06
		HAPS	0.00022	<0.001
247	Tank 16 Heater (5)	PM ₁₀	0.006	0.027
		SO ₂	0.0005	0.002
		NO _x	0.080	0.351
		CO	0.07	0.295
		VOC	0.004	0.020
		HAPS	0.00007	<0.001
250	Tank 17 Heater 1 (5)	PM ₁₀	0.019	0.083
		SO ₂	0.002	0.007
		NO _x	0.250	1.100
		CO	0.210	0.920
		VOC	0.014	0.06
		HAPS	0.00022	<0.001
251	Tank 17 Heater 2 (5)	PM ₁₀	0.019	0.083
		SO ₂	0.002	0.007
		NO _x	0.250	1.100

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
		CO	0.210	0.920
		VOC	0.014	0.06
		HAPS	0.00022	<0.001
254	Tank 18 Heater (5)	PM ₁₀	0.006	0.027
		SO ₂	0.0005	0.002
		NO _x	0.080	0.351
		CO	0.07	0.295
		VOC	0.004	0.020
		HAPS	0.00007	<0.001
271 and FUG-2	Asphalt Tank Car (4 and 7)		PM	0.0012
	<0.003			
	Unloading	PM ₁₀	0.0001	<0.001
		CO	0.1173	0.122
		H ₂ S	0.1137	0.118
		VOC(a)	0.0041	0.009
217, 218, and 219	Asphalt Truck Loading (5 and 7)		PM	0.132
	0.092			
	Racks	PM ₁₀	0.013	0.009
		CO	0.257	0.085
		VOC(a)	0.479	0.57
		H ₂ S	0.039	0.02
		HAPS	0.0003	<0.001
258	Tank 20	VOC	0.022	<0.001
280 and 282 through 286	Pouring Sheds A, B, (7) and C	PM	0.986	0.779
		PM ₁₀	0.0986	0.078
		CO	0.045	0.035
		VOC(a)	3.50	2.76
		H ₂ S	0.0011	<0.001

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
287	Asphalt Solvent (5) Cold Cleaner	VOC HAPS	0.075 0.0059	0.330 0.024
311	Cutter Stock Loading System	VOC	46.97	3.41
313	Asphalt Solvent (5) Cold Cleaner	VOC HAPS	0.075 0.0004	0.330 <0.002
23-A, 23-B, 23-C, and 23-D	Cooling Stack (7) 7.91	PM VOC	6.72 2.35	26.38 9.23
		PM ₁₀	2.02	
4	Filler Silo Baghouse	PM ₁₀ HAPS 0.00054	0.18 0.002	0.79
5	Filler Hopper Baghouse	PM ₁₀ HAPS 0.00036	0.10 <0.002	0.45
6	Filler Heater Baghouse	PM HAPS	0.02 0.00036	0.08 <0.002
10	Sand Silo Baghouse	PM ₁₀ HAPS	0.002 0.0011	0.009 0.004
11	Process Dust Collector	PM ₁₀ VOC HAPS 0.00036	0.02 0.50 <0.002	0.08 1.95
16	Filler Oil Heater	PM ₁₀ SO ₂ NO _x CO	0.114 0.009 1.50 1.26	0.50 0.04 6.57 5.52

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
		VOC	0.083	0.36
		HAPS	0.0013	<0.006
18	Process Oil Heater	PM ₁₀	0.095	0.416
		SO ₂	0.007	0.033
		NO _x	1.25	5.475
		CO	1.05	4.599
		VOC	0.069	0.301
		HAPS	0.0011	<0.005
164	Sealant Tank	PM ₁₀	0.024	0.003
		CO	0.854	0.035
		VOC	0.832	0.0107
		H ₂ S	0.114	0.006
318	Hot Oil Heater No. 2 (5) 4 MM BTU	PM ₁₀	0.03	0.13
		SO ₂	<0.001	0.01
		NO _x	0.40	1.75
		CO	0.34	1.47
		VOC	0.02	0.10
		HAPS	0.0004	<0.002
319	Hot Oil Heater No. 1 (5) 2 MM BTU	PM ₁₀	0.02	0.07
		SO ₂	<0.0013	0.01
		NO _x	0.20	0.88
		CO	0.17	0.74
		VOC	0.01	0.05
		HAPS	0.0002	<0.001
320	4 Wide RTO Stack (8)	PM ₁₀	0.14	0.55

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	<u>Emission Rates</u>	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>
		SO ₂	0.57	2.25
		NO _x	0.16	0.70
		CO	0.14	0.63
		VOC	0.25	0.99
		HAPS	0.056	0.206
321 and 322	6 Wide Bldg Vents (8)	PM	2.95	12.46
		PM ₁₀	1.40	5.93
		VOC	3.28	13.85
		HAPS	0.298	1.27
323	6 Wide Upper Filler Bin (8) 0.38	PM ₁₀		0.09
		HAPS	0.0003	0.001
327	6 Wide Lower Filler Bin (8) 0.02	PM ₁₀		0.006
		HAPS 0.0003	0.001	
324	6 Wide Process Dust Collector (8) 0.20	PM ₁₀		0.04
		VOC	0.35	1.48
		HAPS	0.0003	0.001
325	6 Wide RTO Stack (8)	PM ₁₀	0.192	0.81
		SO ₂	2.74	11.87
		NO _x	0.16	0.70
		CO	0.187	0.82
		VOC	0.364	1.54
		HAPS	0.093	0.40
326	Bulk Filler Silo No. 2 (8) 0.38	PM ₁₀		0.09

		HAPS	0.0003	0.001
333	Filler Silo No. 2	(8) PM10	0.18	0.76
	Transfer Conveyor	HAPS	0.0006	0.002
328	Preheater (8)	PM ₁₀	0.019	0.083
		SO ₂	0.002	0.007
		NO _x	0.25	1.095
		CO	0.21	0.92
		VOC	0.014	0.06
		HAPS	0.0002	<0.001

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	<u>Emission Rates</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
330	Bulk Prime Storage	PM ₁₀	0.09	0.35
331	Bulk Headlap Granule Storage	PM ₁₀	0.07	0.33

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources use area name or fugitive source name.

(3) PM - particulate matter suspended in the atmosphere, including PM₁₀.

PM₁₀ - particulate matter of 10 microns or less in diameter. Where PM is not listed, it shall

be assumed that no PM greater than 10 microns is emitted.

- SO₂ - sulfur dioxide
NO_x - total oxides of nitrogen
VOC - volatile organic compounds as defined in 30 Texas
Administrative Code Section 101.1.
VOC(a) - asphalt fumes
H₂S - hydrogen sulfide
HCl - hydrogen chloride
HAPS - any of the Section 112(b), Federal Clean Air Act named
compounds
CO - carbon monoxide
(4) Fugitive emissions are an estimate only.
(5) HAPS included in PM and VOC emission rates. H₂S, HCl, benzene,
and ethyl benzene are not included in HAPS value. Speciated
emissions are reflected on the Table 1(a) in the permit file.
(6) For annual emissions see EPNs 1A and 3.
(7) Total emissions from all listed EPNs.
(8) All HAPS included in PM and/or VOC emission rates.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- * Emission rates are based on and the facilities are limited by the
following maximum operating schedule and throughputs:

Hrs/day 24 Days/week 7 Weeks/year 52 or Hrs/year 8,760

Maximum hourly asphalt blowing throughput and a maximum annual
throughput of asphalt are shown by the confidential Owens
Corning fiberglass emission calculations dated June 1999 with
Revision pages dated July 28, 1999 and located in the
confidential file.

Permit No. 6907
Page 11

Dated_____