EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 5264

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**
Bay 1 Allowable Emissions				
A425	DHR Dust Collector	PM_{10}	0.13	0.56
B1EXT1	Bay 1 Extruder Feed Hopper Baghouse	PM_{10}	0.09	0.37
		VOC	0.01	0.03
BN-1008	Bay 1 Surge Hopper Super Sack Filter	PM_{10}	0.01	0.01
DIESELTK	Diesel Tank	VOC	0.02	0.01
DR1006	Bay 1 Pellet Dryer	PM_{10}	0.64	2.81
		VOC	1.02	4.46
E352.1RVEN	Pellet Bin Filters	PM_{10}	0.49	2.13
E352.2RVEN	Pellet Bin Filters	PM_{10}	0.49	2.13
E352.3RVEN	Pellet Bin Filters	PM_{10}	0.49	2.13
E354.1VEN	Loadout Bin Filter	PM_{10}	0.49	2.13
E354.2VEN	Loadout Bin Filter	PM_{10}	0.49	2.13
E378VEN	Blend Silo Filter	PM_{10}	0.26	1.13
F213VEN	Hexane Tanks	VOC	1.11	0.23
F277VEN	Titanium Chloride	HCl	0.06	0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates* lb/hr	TPY**
	(HCl) Tank			
FL1037	Additive Dump Hopper Dust Collector	PM_{10}	0.16	0.69
FL1038A	Additive Agitator/Feeder Purge Sock Filter	PM_{10}	0.01	0.01
FL1038B	Additive Agitator/Feeder Purge Sock Filter	PM_{10}	0.01	0.01
FL1038C	Additive Agitator/Feeder Purge Sock Filter	PM_{10}	0.01	0.01
FL1039	Additive Agitator/Feeder Purge Sock Filter	PM_{10}	0.01	0.01
GASTK	Gasoline Tank	VOC	3.28	0.51
GQ352VEN	Bay 1 Flare Routine Emission	VOC	111.61	39.27
		NO_x	19.50	10.86
		CO	167.19	24.96
		Ethylene	49.21	16.87
		Butene	27.66	3.20
	Bay 1 Flare Maintenance Emission (6)	VOC	201.59	
		NO_x	25.18	
		CO	215.91	
		Ethylene	49.21	
		Butene	27.66	
GT335	Bay 1 Cooling Tower (4)	VOC	0.55	2.40
		PM_{10}	0.42	1.82
		Ethylene	0.27	1.20

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates* lb/hr	TPY**
		Butene	0.27	1.20
CEB	Bay 1 Vapor Combustor Routine Emission	VOC	4.92	5.95
		PM_{10}	0.17	0.36
		NO_x	0.77	1.60
		CO	1.90	3.96
		SO_2	0.01	0.03
	Bay 1 Vapor Combustor Maintenance Emission (6)	VOC	11.73	
		PM_{10}	0.20	
		NO_x	0.87	
		CO	2.16	
		SO_2	0.02	
BAY1FUG	Bay 1 Equipment Fugitives (4)	VOC	2.70	11.84
		Ethylene	1.05	4.61
		Butene	0.02	0.08
B1DEGAS	Bay 1 Pellet Degas Emissions	VOC	12.61	13.50
BAY1PMFG	Bay 1 Uncaptured Particulate Matter Fugitives (4)	PM_{10}	0.26	1.13
A417SUMP	DHR Sump	VOC	0.01	0.01
A670SUMP	A670 Sump	VOC	0.01	0.01
B1SWSUMP	Bay 1 Process Stormwater Sump	VOC	0.10	0.45
A653SUMP	A650 and A653 Sumps	VOC	0.01	0.01
BAY1WAX	Polyethylene Wax Loading	VOC	0.05	0.11
Bay 2 Allowable Emissions				
B2DEGAS	Bay 2 Pellet Degas Emissions	VOC	15.61	7.58
200	Bay 2 Pellet Dryer	VOC	0.68	2.97

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates* lb/hr	TPY**
		PM_{10}	0.64	2.81
201	Flash Chamber Screen Maintenance	VOC	2.68	0.38
202	Pellet Blender Outlet Filter	PM_{10}	0.82	3.59
207	Railcar Loadout Dust Collector	PM_{10}	0.32	1.41
208	Extruder Feed Dust Collector	PM_{10}	0.09	0.39
		VOC	0.25	1.12
208A	Extruder Feed Super Sack Filter Sock	PM_{10}	0.09	0.39
		VOC	0.25	1.12
209	Bay 2 Flare	VOC	59.20	47.98
		NO_x	18.62	10.74
		CO	159.67	92.05
		Ethylene	51.88	1.63
	Bay 2 Flare Maintenance Emissions (6)	VOC	228.51	
		NO_x	31.12	
		CO	266.86	
		Ethylene	51.88	
210	Boiler 1	VOC	0.92	1.90
		PM_{10}	0.37	1.14
		NO_x	2.65	8.11
		CO	4.14	12.57
		SO_2	0.03	0.09
211	Boiler 2	VOC	0.92	1.96

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates* lb/hr	TPY**
		PM_{10}	0.37	1.22
		NO_x	2.93	9.65
		CO	4.14	13.53
		SO_2	0.03	0.10
212	Bay 2 Cooling Tower (4)	VOC	0.44	1.92
		PM_{10}	0.33	1.46
		Ethylene	0.44	1.92
BAY2FUG	Bay 2 Equipment Fugitives (4)	VOC	2.49	10.89
		Ethylene	0.85	3.72
		Butene	0.01	0.01
		Propylene	0.01	0.01
215	Catalyst HEPA Filter	PM_{10}	0.02	0.10
		VOC	1.73	5.44
		Cr(IV)	0.01	0.01
216	Catalyst Activator Furnace	VOC	0.04	0.05
		PM_{10}	0.05	0.07
		NO_x	0.39	0.51
		CO	0.54	0.78
		SO_2	0.01	0.01
217	Liquid Additive Tank	VOC	0.06	0.01
217A	Liquid Additive Metering Tank	VOC	0.06	0.01
218	Solid Additives Dump Hopper Dust Collector	PM_{10}	0.16	0.69
219	Fire Water Pump Diesel Tank A	VOC	0.02	0.01
220	Fire Water Pump Diesel Tank B	VOC	0.02	0.01
222	Waste Catalyst HEPA Filter	PM_{10}	0.02	0.11

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates* lb/hr	TPY**
223	Quench Tower	PM_{10}	0.01	0.01
224	Bay 2 Extruder Breather Vent	VOC	0.04	0.16
225	Bay 2 Pellet Surge Hopper Super Sack Filter	PM_{10}	0.01	0.01
BAY2PMFG	Bay 2 Uncaptured Particulate Matter Fugitives (4) (5)	PM_{10}	0.42	1.61
B2SWSUMP	Bay 2 Process Stormwater Sump	VOC	0.10	0.64
Common Facilities Allowable Emissions				
BIOSWRBX	Biosan Weir Box and Flare Sump	VOC	0.01	0.02
SWTANK	Stormwater Tank	VOC	0.01	0.01
VEH008	Diesel Air Compressor	VOC	0.06	0.01
		PM_{10}	0.04	0.01
		NO_x	1.68	0.30
		CO	0.33	0.06
		SO_2	0.21	0.04
VEH009	Sandblaster Air Compressor	VOC	0.06	0.01
		PM_{10}	0.04	0.01
		NO_x	1.68	0.07
		CO	0.33	0.01
		SO_2	0.21	0.01
PP-8008A	North Firewater Pump	VOC	0.23	0.01
		PM_{10}	0.16	0.01
		NO_x	6.92	0.35
		CO	1.34	0.07

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**
		SO_2	0.84	0.04
PP-8008B	South Firewater Pump	VOC	0.23	0.01
		PM_{10}	0.16	0.01
		NO_x	6.92	0.35
		CO	1.34	0.07
		SO_2	0.84	0.04
SPRYDGSR	Spray Degreasing	VOC	2.59	2.43
TK-010	Spent Lube Oil Tank	VOC	0.01	0.01
X3CAT	X3 Catalyst	VOC	0.92	0.01
209TRTRE	Treater Regeneration	VOC	48.70	1.19
		NO_x	4.76	0.10
		CO	40.85	0.83
MSS_ATM	Atmospheric Emissions	VOC	762.69	3.84
		$PM/PM_{10}/PM_{2.5}$	7.41	0.32
		NO_x	4.00	2.88
		CO	6.06	3.89

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(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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code ' 101.1
PM - particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - particulate matter equal to or less than 10 microns in diameter
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
CO - carbon monoxide
HCl - hydrogen chloride
Cr(IV) - chromium
(4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
(5) Chromium emissions shall not exceed 5 weight percent of the PM_{10}.
(6) Annual emissions for planned maintenance are included in the routine annual emissions.

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

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

** Annual emissions are based on a rolling 12-month average.

Dated November 18, 2010