

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, sources, and related activities. 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	
			lbs/hour	TPY (4)
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) Tank	HCl	0.06	0.01
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	PM ₁₀	0.01	0.01

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	Agitator/Feeder Purge Sock Filter			
GASTK	Gasoline Tank	VOC	3.28	0.51
GQ352VEN	Bay 1 Flare Routine Emissions	VOC	113.73	42.39
		NO _x	19.50	11.91
		CO	167.19	27.35
		Ethylene	49.21	24.78
		Butene	27.66	17.59
	Bay 1 Flare Maintenance Emissions (6)	VOC	201.59	—
		NO _x	25.18	—
		CO	215.91	—
		Ethylene	49.21	—
		Butene	27.66	—
GT335	Bay 1 Cooling Tower (5)	VOC	0.55	2.40
		PM ₁₀	0.42	1.82
		Ethylene	0.27	1.20
		Butene	0.27	1.20
CEB	Bay 1 Vapor Combustor Routine Emissions	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 Emissions (6)	VOC	11.73	—
		PM ₁₀	0.20	—
		NO _x	0.87	—
		CO	2.16	—
		SO ₂	0.02	—
BAY1FUG	Bay 1 Equipment Fugitives (5)	VOC	2.70	11.84
		Ethylene	1.05	4.61
		Butene	0.02	0.08

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B1DEGAS	Bay 1 Pellet Degas Emissions	VOC	12.61	13.50
BAY1PMFG	Bay1 Uncaptured Particulate Matter Fugitives (5)	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
		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	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	4.24
	Bay 2 Flare Maintenance Emissions (6)	VOC	228.51	—
		NO _x	31.12	—
		CO	266.86	—
		Ethylene	51.88	—

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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
		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 (5)	VOC	0.44	1.92
		PM ₁₀	0.33	1.46
		Ethylene	0.44	1.92
BAY2FUG	Bay 2 Equipment Fugitives (5)	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	VOC	0.02	0.01

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	Diesel Tank A			
220	Fire Water Pump Diesel Tank B	VOC	0.02	0.01
222	Waste Catalyst HEPA Filter	PM ₁₀	0.02	0.11
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 (5)(7)	PM ₁₀	0.42	1.61
B2SWSUMP	Bay 2 Process Stormwater Sump	VOC	0.10	0.64
Bay 1 and Bay 2 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
		SO ₂	0.84	0.04

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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	7.41	0.32
		PM ₁₀	7.41	0.32
		PM _{2.5}	7.41	0.32
		NO _x	4.00	2.88
		CO	6.06	3.89
Bay 3 Allowable Emissions				
BAY3TO	Thermal Oxidizer	NO _x	2.35	10.29
		CO	1.37	6.00
		SO ₂	0.02	0.10
		VOC	0.18	0.78
		PM	0.29	1.28
		PM ₁₀	0.29	1.28
		PM _{2.5}	0.29	1.28
		HAP	<0.01	0.01
BAY3SA	Solid Additive Blowerguard Filter	PM	0.09	0.02
		PM ₁₀	0.09	0.02
		PM _{2.5}	0.09	0.02

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B3CBRUB	Carbon Black Master Batch Railcar Unloading Bin Filter	PM	0.07	0.03
		PM ₁₀	0.04	0.02
		PM _{2.5}	<0.01	<0.01
BAY3CBMB1	Carbon Black Master Batch Bin Filter 1	PM	0.05	0.05
		PM ₁₀	0.03	0.02
		PM _{2.5}	<0.01	<0.01
BAY3CBMB2	Carbon Black Master Batch Bin Filter 2	PM	0.05	Included in BAY3CBMB1
		PM ₁₀	0.03	Included in BAY3CBMB1
		PM _{2.5}	<0.01	Included in BAY3CBMB1
B3CMBMFBF	Carbon Black Master Batch Feed Bin Filter	PM	0.12	0.05
		PM ₁₀	0.06	0.03
		PM _{2.5}	<0.01	<0.01
BAY3FLR	Multi-point Ground Flare (pilot and Purge Emissions)	NO _x	0.08	0.37
		CO	0.61	2.68
		VOC	0.08	0.35
		SO ₂	<0.01	<0.01
		HAP	0.05	0.22
	Multi-point Ground Flare (TO Backup Emissions)	NO _x	2.45	0.21
		CO	12.51	1.09
		VOC	20.13	1.76
		SO ₂	0.02	<0.01
		HAP	0.48	0.04
	Multi-point Ground Flare (MSS Emissions)	NO _x	108.32	0.17
		CO	782.35	1.19
		VOC	1601.16	2.38
		SO ₂	1.31	<0.01
BAY3PP	Purge Pellet Bin Filter	VOC	14.51	Cap 1
		PM	0.13	0.06

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		PM ₁₀	0.06	0.03
		PM _{2.5}	<0.01	<0.01
		HAP	1.45	Cap 1
BAY3RP	Recycle Pellets Feed Bin Filter	VOC	14.51	Cap 1
		PM	0.13	0.06
		PM ₁₀	0.06	0.03
		PM _{2.5}	<0.01	<0.01
		HAP	1.45	Cap 1
BAY3EH1	Extruder Hopper Filter 1	VOC	14.51	Cap 1
		PM	0.01	0.03
		PM ₁₀	<0.01	0.01
		PM _{2.5}	<0.01	<0.01
		HAP	1.45	Cap 1
BAY3EH2	Extruder Hopper Filter 2	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
BAY3ES1	Pellet Surge Bin 1	VOC	14.51	Cap 1
		PM	0.13	0.43
		PM ₁₀	0.06	0.20
		PM _{2.5}	0.01	0.03
		HAP	1.45	Cap 1
BAY3ES2	Pellet Surge Bin 2	VOC	14.51	Cap 1
		PM	0.13	Included in BAY3ES1
		PM ₁₀	0.06	Included in BAY3ES1
		PM _{2.5}	0.01	Included in BAY3ES1
		HAP	1.45	Cap 1

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BAY3BS	Blender Silo Vent Filter	VOC	14.51	Cap 1
		PM	0.34	1.51
		PM ₁₀	0.17	0.75
		PM _{2.5}	<0.01	<0.01
		HAP	1.45	Cap 1
BAY3EF1	Elutriator Filter 1	VOC	14.51	Cap 1
		PM	0.33	1.03
		PM ₁₀	0.16	0.51
		PM _{2.5}	<0.01	<0.01
		HAP	1.45	Cap 1
BAY3EF2	Elutriator Filter 2	VOC	14.51	Cap 1
		PM	0.33	Included in BAY3EF1
		PM ₁₀	0.16	Included in BAY3EF1
		PM _{2.5}	<0.01	Included in BAY3EF1
		HAP	1.45	Cap 1
BAY3PL1	Pellet Loadout Silo Filter 1	VOC	14.51	Cap 1
		PM	0.01	0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		HAP	1.45	Cap 1
BAY3PL2	Pellet Loadout Silo Filter 2	VOC	14.51	Cap 1
		PM	0.01	Included in BAY3PL1
		PM ₁₀	<0.01	Included in BAY3PL1
		PM _{2.5}	<0.01	Included in BAY3PL1
		HAP	1.45	Cap 1
BAY3PL3	Pellet Loadout Silo Filter 3	VOC	14.51	Cap 1
		PM	0.01	0.01

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		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		HAP	1.45	Cap 1
BAY3PL4	Pellet Loadout Silo Filter 4	VOC	14.51	Cap 1
		PM	0.01	Included in BAY3PL3
		PM ₁₀	<0.01	Included in BAY3PL3
		PM _{2.5}	<0.01	Included in BAY3PL3
		HAP	1.45	Cap 1
BAY3RLW1	Railcar Waste Receiver Filter	PM	0.09	0.02
		PM ₁₀	0.04	0.01
		PM _{2.5}	<0.01	0.01
B3RLWPF	Railcar Waste Pellet Filter	PM	0.05	0.01
		PM ₁₀	0.02	0.01
		PM _{2.5}	<0.01	0.01
BAY3RL1	Railcar Loading Filter 1	PM	0.01	0.01
		PM ₁₀	0.01	<0.01
		PM _{2.5}	<0.01	<0.01
BAY3RL2	Railcar Loading Filter 2	PM	0.01	Included in BAY3RL1
		PM ₁₀	0.01	Included in BAY3RL1
		PM _{2.5}	0.01	Included in BAY3RL1
BAY3RL3	Railcar Loading Filter 3	PM	0.01	0.01
		PM ₁₀	0.01	<0.01
		PM _{2.5}	0.01	<0.01
BAY3RL4	Railcar Loading Filter 4	PM	0.01	Included in BAY3RL3
		PM ₁₀	0.01	Included in BAY3RL3
		PM _{2.5}	0.01	Included in BAY3RL3

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BAY3DR1	Pellet Dryer 1	VOC	14.51	Cap 1
		PM	0.31	1.03
		PM ₁₀	0.31	1.03
		PM _{2.5}	0.31	1.03
		HAP	1.45	Cap 1
BAY3DR2	Pellet Dryer 2	VOC	14.51	Cap 1
		PM	0.31	Included in BAY3DR1
		PM ₁₀	0.31	Included in BAY3DR1
		PM _{2.5}	0.31	Included in BAY3DR1
		HAP	1.45	Cap 1
Cap 1: BAY3OG	Pellet Off-gas Source Cap	VOC	Source-specific	20.67
		HAP	Source-specific	2.07
B3CLTWR	Bay 3 Cooling Tower	PM	0.36	1.57
		PM ₁₀	0.23	1.00
		PM _{2.5}	<0.01	<0.01
BAY3BLR3	Bay 3 Boiler 3	NO _x	0.92	4.81
		CO	2.62	13.75
		VOC	0.40	1.76
		SO ₂	0.03	0.18
		PM	0.34	1.62
		PM ₁₀	0.34	1.62
		PM _{2.5}	0.34	1.62
		NH ₃	0.32	1.67
		HAP	0.59	1.56
BAY3BLR4	Bay 3 Boiler 4	NO _x	0.92	Included in BAY3BLR3
		CO	2.62	Included in BAY3BLR3
		VOC	0.40	Included in BAY3BLR3

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		SO ₂	0.03	Included in BAY3BLR3
		PM	0.34	Included in BAY3BLR3
		PM ₁₀	0.34	Included in BAY3BLR3
		PM _{2.5}	0.34	Included in BAY3BLR3
		NH ₃	0.32	Included in BAY3BLR3
		HAP	0.59	Included in BAY3BLR3
B3WWTK	Process Wastewater Sump	VOC	<0.01	<0.01
B3HTOILA	Hot Oil Surge Tank	VOC	<0.01	<0.01
B3HTOILB	Hot Oil Surge Tank	VOC	<0.01	<0.01
BAY3FUG	Fugitives (5)	VOC	2.43	10.66
		HAP	0.05	0.20
BAY3MSS	Maintenance, Start-up, and Shutdown (8)	NO _x	<0.01	<0.01
		CO	1.27	0.44
		VOC	141.66	0.22
		SO ₂	1.31	<0.01
		PM	0.09	0.11
		PM ₁₀	0.02	0.05
		PM _{2.5}	0.05	0.02

- (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
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
HCl - hydrogen chloride
Cr(IV) - chromium
PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
NH₃ - Ammonia

(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.

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- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Annual emissions for planned maintenance are included in the routine annual emissions.
- (7) Chromium emissions shall not exceed 5 weight percent of the PM₁₀.
- (8) This EPN represents all the MSS activities at Bay 3 with the exception of MSS-related flaring, which is included under the multi-point ground flare (EPN BAY3FL).

Date: _____ **DATE**

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