Permit Number 19546

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	
		Name (3)	lbs/hour	TPY (4)
CAT-WWTR	Wastewater System	voc	2.93	0.46
79	Fugitives (8)	voc	4.97	21.75
D-8109	Catalyst Dispersion Drum	voc	0.25	0.01
D-8114	Catalyst Dispersion Drum	voc	0.25	0.01
FL-8651	Flare (Standard)	VOC	25.19	29.51
		NO _x	10.39	8.63
		СО	52.95	43.94
		SO ₂	0.17	0.64
	Flare (Product changeover only)	VOC (5)	60.00	(7)
		NO _x (5)	17.60	
		CO (5)	89.80	
		SO ₂ (5)	0.01	
	Flare (MSS Activities)	VOC (6)	110.00	
		Ethylene	75.00	
		Propylene	110.00	
		NO _x	32.40	
		СО	164.00	
		SO ₂	0.01	
F-8503	Stabilizer Handling Bag Filter	voc	(9)	(9)
		РМ	0.09	0.38
		PM ₁₀	0.09	0.38
		PM _{2.5}	0.09	0.38

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F-8820A	Blending Silos Bag Filter	voc	(9)	(9)
		РМ	0.07	0.32
		PM ₁₀	0.07	0.32
		PM _{2.5}	0.07	0.32
F-8820B	Blending Silos Bag Filter	voc	(9)	(9)
		РМ	0.07	0.32
		PM ₁₀	0.07	0.32
		PM _{2.5}	0.07	0.32
F-8811	Bag Loading Bag Filter	voc	(10)	(10)
		Acetone	(11)	(11)
		РМ	0.04	0.19
		PM ₁₀	0.04	0.19
		PM _{2.5}	0.04	0.19
F-8812	Bag Loading Bag Filter	VOC	(10)	(10)
		Acetone	(11)	(11)
		РМ	0.04	0.19
		PM ₁₀	0.04	0.19
		PM _{2.5}	0.04	0.19
F-8813	Railcar Loading (F-8813 Bag Filter)	voc	(10)	(10)
		Acetone	(11)	(11)
		РМ	0.04	0.19
		PM ₁₀	0.04	0.19
		PM _{2.5}	0.04	0.19
F-8850	Extruder Surge Silo Bag Filter	VOC	(9)	(9)
		PM	0.05	0.22
		PM ₁₀	0.05	0.22
		PM _{2.5}	0.05	0.22

F-8555	Vent Vacuum System Bag Filter	VOC	(10)	(10)
		Acetone	(11)	(11)
		PM	0.21	0.94
		PM ₁₀	0.21	0.94
		PM _{2.5}	0.21	0.94
D-8805	Pellet Silo	voc	(10)	(10)
		Acetone	(11)	(11)
		PM	0.01	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
D-8806	Pellet Silo	voc	(10)	(10)
		Acetone	(11)	(11)
		PM	0.01	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
D-8807	Pellet Silo	voc	(10)	(10)
		Acetone	(11)	(11)
		РМ	0.01	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-8501	Product Receiver Bag Filter	voc	(9)	(9)
		РМ	0.12	0.50
		PM ₁₀	0.12	0.50
		PM _{2.5}	0.12	0.50

F-8502	Product Surge Silo Bag Filter	voc	(9)	(9)
		PM	0.01	0.01

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				0.04
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-8556	Centralized Vacuum Cleaning Bag Filter	VOC	(10)	(10)
		Acetone	(11)	(11)
		РМ	0.02	0.11
		PM ₁₀	0.02	0.11
		PM _{2.5}	0.02	0.11
94	TK-8401 Steamer Scrubber	VOC	0.03	0.13
CT-8631	Catalloy Cooling Tower	voc	0.51	2.22
		РМ	0.31	1.37
		PM ₁₀	0.17	0.76
		PM _{2.5}	<0.01	<0.01
CT-8632	MP3 Cooling Tower	PM	0.19	0.82
		PM ₁₀	0.10	0.46
		PM _{2.5}	<0.01	<0.01
D-8106	Additive Surge Drum	VOC	0.02	0.01
D-8105A	Donor Storage Drum	voc	0.06	0.01
D-8105B	Donor Storage Drum	VOC	0.06	0.01
D-8693	TEAL Seal Oil Pot	voc	0.02	0.01
D-8108	Mineral Oil Storage Drum	voc	0.20	0.01
D-8111	Hydraulic Oil Surge Drum	voc	0.07	0.01
D-8707	Waste Oil Loading	voc	0.38	0.01
142	Dryer Scrubber	voc	0.06	0.25
D-8107	Grease Storage Drum	voc	0.20	0.01
MSS23	Product Pluggage in Reactors	VOC	3.45	0.10
MSS24	Catalloy Maintenance Shutdown	VOC	28.98	0.12
MSS25	Catalloy Butene Purification Shutdown	VOC	0.28	0.01
MSS26	Catalloy Propane Purification Shutdown	VOC	13.80	0.01
MSS27	Catalloy Propane Purification Regeneration	VOC	4.14	0.01

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MSS28	Catalloy Ethylene Purification Shutdown	voc	4.14	0.01
MSS29	Catalloy Ethylene Purification Regeneration	voc	4.14	0.01
MSS30	Catalloy Off-Gas Compressor Maintenance	voc	0.01	0.01
MSS31	Catalloy Compressor Maintenance Shutdown	voc	0.05	0.01
MSS32	Catalloy Pump Maintenance	voc	0.06	0.01
MSS33	Catalloy Propane Purification Pump Maintenance	voc	19.33	0.08
MSS34	Catalloy Commercial Shutdown	voc	19.33	0.08
MSS35	Catalloy Gas Phase Reactor Cleaning	voc	13.80	0.10
MSS36	Catalloy Filter Changes	voc	0.03	0.01

- (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

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

- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Emissions are limited to no more than 5 hours during each product type changeover and are an extension of the lb/hr limitation only.
- (6) The allowable emission rates for individual VOC species from this Emission Point No. (EPN) are included in the total VOC emission rates.
- (7) The combined annual allowable emission limits for this EPN are specified for Source Name "Flare (Standard)".
- (8) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
- (9) Total maximum VOC emissions from these points shall not exceed 2.00 lbs/hr or 2.50 tons per year.
- (10) Total maximum VOC emissions from these points shall not exceed 3.13 lbs/hr or 3.75 tons per year.
- (11) Total maximum acetone emissions from these points shall not exceed 2.03 lbs/hr or 4.63 tons per year.

Date:	Sentember	20	2019