

# Emission Sources - Maximum Allowable Emission Rates

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	
			lbs/hour	TPY (4)
79	Fugitives (10)	VOC	4.97	21.75
80A	D-8109 Catalyst Vent	VOC	0.25	0.01
80B	D-8114 Catalyst Vent	VOC	0.25	0.01
81	Flare (Standard)	VOC	25.00	29.33
		NO <sub>x</sub>	6.90	7.93
		CO	35.17	40.39
		SO <sub>2</sub>	0.14	0.63
	Flare (Product changeover only)	VOC (6)	60.00	(8)
		NO <sub>x</sub> (6)	17.60	
		CO (6)	89.80	
		SO <sub>2</sub> (6)	0.01	
	Flare (MSS Activities)	VOC (7)	110.00	
		Ethylene	75.00	
		Propylene	110.00	
		NO <sub>x</sub>	32.40	
		CO	164.00	
		SO <sub>2</sub>	0.01	
82	F-8503 Bag Filter	VOC	(5)	(5)
		PM <sub>10</sub>	0.09	0.38
83A	F-8820A Bag Filter	VOC	(5)	(5)
		PM <sub>10</sub>	0.07	0.32
83B	F-8820B Bag Filter	VOC	(5)	(5)
		PM <sub>10</sub>	0.07	0.32
84A	F-8811Bag Filter	VOC	(5)	(5)
		PM <sub>10</sub>	0.04	0.19
84B	F-8812 Bag Filter	VOC	(5)	(5)
		PM <sub>10</sub>	0.04	0.19

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85	F-8813 Bag Filter	VOC	(5)	(5)
		PM <sub>10</sub>	0.04	0.19
86	F-8850 Bag Filter	VOC	(5)	(5)
		PM <sub>10</sub>	0.05	0.22
87	F-8555 Bag Filter	VOC	(5)	(5)
		PM <sub>10</sub>	0.21	0.94
88	Extruder Vent	VOC	0.01	0.01
89A	D-8805 Silo Vent	VOC	(5)	(5)
		PM <sub>10</sub>	0.01	0.01
89B	D-8806 Silo Vent	VOC	(5)	(5)
		PM <sub>10</sub>	0.01	0.01
89C	D-8807 Silo Vent	VOC	(5)	(5)
		PM <sub>10</sub>	0.01	0.01
91	F-8501 Silo Vent	VOC	(5)	(5)
		PM <sub>10</sub>	0.12	0.50
92	F-8502 Silo Vent	VOC	(5)	(5)
		PM <sub>10</sub>	0.01	0.01
93	F-8556 Extrusion Bag Filter	VOC	(5)	(5)
		PM <sub>10</sub>	0.02	0.11
94	TK-8401 Steamer Scrubber	VOC	0.03	0.13
95	Catalloy Cooling Tower	VOC	0.51	2.22
		PM <sub>10</sub> (9)	0.31	1.37
96	MP3 Cooling Tower	PM <sub>10</sub> (9)	0.19	0.82
97	Railcar Loading	VOC	(5)	(5)
136	D-8106 Additive Surge Drum	VOC	0.02	0.01
137A	D-8106A Donor Storage Drum	VOC	0.06	0.01
137B	D-8106B Donor Storage Drum	VOC	0.06	0.01
138	D-8693 TEAL Seal Pot	VOC	0.02	0.01
139	D-8108 Mineral Oil Drum	VOC	0.20	0.01
140	D-8111 and D-8111 Hydraulic Oil Surge Drum	VOC	0.07	0.01
141	D-8707 Waste Oil Loading	VOC	0.38	0.01
142	Dryer Scrubber	VOC	0.06	0.25
145	D-8107 Oil and Grease Drum	VOC	0.20	0.01

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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
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) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
  - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
  - HRVOC - highly reactive volatile organic compounds as defined in 30 TAC § 115.10
  - IOC-U - inorganic compounds (unspeciated)
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
  - PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
  - PM<sub>2.5</sub> - 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
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Total maximum VOC emissions from these points shall not exceed 2 lbs/hr or 2.5 tons per year.
- (6) Emissions are limited to no more than 5 hours during each product type changeover and are an extension of the lb/hr limitation only.
- (7) The allowable emission rates for individual VOC species from this Emission Point No. (EPN) are included in the total VOC emission rates.
- (8) The combined annual allowable emission limits for this EPN are specified for Source Name "Flare (Standard)" on page one.
- (9) Effective September 1, 2009.

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(10) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.

Date: \_\_\_\_\_