

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 18105

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)
029AV3	Feed Purification Analyzer Vents	VOC	0.23	1.02
029AV4	Line 1 Material Recovery Analyzer Vents	VOC	0.16	0.70
029AV5	Line 2 Material Recovery Analyzer Vents	VOC	0.21	0.94
064EX104	Processing Area Extruder 104	PM	0.98	4.10
		PM <sub>2.5</sub>	0.98	4.10
		PM <sub>10</sub>	0.98	4.10
		VOC	4.66	3.12
		Acetone	1.03	1.16
064EX105	Processing Area Extruder 105	PM	0.98	4.10
		PM <sub>2.5</sub>	0.98	4.10
		PM <sub>10</sub>	0.98	4.10
		VOC	4.66	3.12
		Acetone	1.03	1.16
064EX104/064EX105	Combined Limit for Processing Area Extruders 104 and 105	PM	0.98	4.10
		PM <sub>2.5</sub>	0.98	4.10
		PM <sub>10</sub>	0.98	4.10
		VOC	4.66	3.12
		Acetone	1.03	1.16
064F126	Processing Area Baghouse	PM	1.89	8.29
		PM <sub>2.5</sub>	1.89	8.29
		PM <sub>10</sub>	1.89	8.29

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064S104A	Pellet Dryer	PM	0.14	0.62
		PM <sub>2.5</sub>	0.14	0.62
		PM <sub>10</sub>	0.14	0.62
064S105A	Pellet Dryer	PM	0.14	0.62
		PM <sub>2.5</sub>	0.14	0.62
		PM <sub>10</sub>	0.14	0.62
064T104G	Organic Peroxide Tank	VOC	0.04	0.001
064T137	Organic Peroxide Tank	VOC	0.10	0.001
072AV1	Line 1 Synthesis Area Analyzer Vents	VOC	0.001	0.004
072AV2	Line 2 Synthesis Area Analyzer Vents	VOC	0.001	0.003
072C110	Compressor Oil Tank	VOC	0.001	0.0002
072C110A	Compressor Oil Tank	VOC	0.001	0.0002
072C120	Compressor Oil Tank	VOC	0.001	0.0002
072D141	Line 1 Pellet Dryer with Exhaust Blower	VOC	1.29	5.09
		PM	0.65	2.10
		PM <sub>2.5</sub>	0.65	2.10
		PM <sub>10</sub>	0.65	2.10
		Acetone	1.16	0.98
072D141A	Line 2 Pellet Dryer with Exhaust Blower	VOC	1.29	5.09
		PM	0.65	2.10
		PM <sub>2.5</sub>	0.65	2.10
		PM <sub>10</sub>	0.65	2.10
		Acetone	1.16	0.98
072D141/072D141A	Combined Limit for Line 1 and Line 2 Pellet Dryers	VOC	1.29	5.09
		PM	1.30	4.20
		PM <sub>2.5</sub>	1.30	4.20

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		PM <sub>10</sub>	1.30	4.20
		Acetone	1.16	0.98
072F251	Synthesis Area Baghouse and Polypropylene load out area	PM	1.90	8.29
		PM <sub>2.5</sub>	1.90	8.29
		PM <sub>10</sub>	1.90	8.29
		VOC	29.67	9.86
		Acetone	4.00	3.40
072T133	Line 1 Organic Peroxide Tank	VOC	5.00 (6)	0.0025
072T133A	Line 2 Organic Peroxide Tank	VOC	5.00 (6)	0.0025
072T139	Line 1 Organic Peroxide Tank	VOC	0.01 (6)	0.002
072T139A	Line 2 Organic Peroxide Tank	VOC	0.01 (6)	0.002
072T150	Catalyst Tank	VOC	0.22 (6)	0.003
072T150A	Catalyst Tank	VOC	0.22 (6)	0.003
072T158	Donor/Atmer Tank	VOC	5.00 (6)	0.0025
072T159	Donor/Atmer Tank	VOC	5.00 (6)	0.0025
139AVOX	Propylene Unloading Oxygen Analyzer Vent	VOC	0.05	0.22
139AVSULF	Propylene Unloading Sulfur Analyzer Vent	VOC	0.18	0.78
148T151	Teal System Tank (Seal Pot)	VOC	5.00 (6)	0.0025
148T153	PEEB Feed Pot	VOC	5.00 (6)	0.003
148T153A	PEEB Feed Pot	VOC	5.00 (6)	0.003
148T157	PEEB Feed Pot	VOC	5.00 (6)	0.0025
148T157A	PEEB Feed Pot	VOC	5.00 (6)	0.0025
238FL301	PP-2 Line 1 Continuous Low Pressure Flare	NO <sub>x</sub>	27.73	13.24
		NO <sub>x</sub> (MSS)	150.79	1.09
		CO	109.38	110.32

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		CO (MSS)	600.54	4.13
		SO <sub>2</sub>	0.02	0.09
		VOC	101.00	86.55
		VOC (MSS)	1110.05	4.81
238FL301A	PP-2 Line 2 Continuous Low Pressure Flare	NO <sub>x</sub>	27.73	13.24
		NO <sub>x</sub> (MSS)	150.79	1.09
		CO	109.38	110.32
		CO (MSS)	600.54	4.13
		SO <sub>2</sub>	0.02	0.09
		VOC	101.00	86.55
		VOC (MSS)	1110.05	4.81
238FL301/238FL301A	Combined Limit for PP-2 Line 1 and Line 2 Low Pressure Flares	NO <sub>x</sub>	27.76 (7)	13.14 (7)
		NO <sub>x</sub> (MSS)	150.79	1.09
		CO	109.66 (7)	110.46 (7)
		CO (MSS)	600.54	4.13
		SO <sub>2</sub>	0.04	0.18
		VOC	101.00	86.55 (7)
		VOC (MSS)	1110.05	4.81

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
238FL301/238FL301A RCUMMSF	Combined Limit for PP-2 Line 1 and Line 2 Low Pressure Flares and Propylene Unloading Rack Flare	NO <sub>x</sub> (MSS)	150.79 (8)	1.18
		CO (MSS)	600.54(8)	4.30
		VOC (MSS)	1110.05 (8)	5.44
238FL330	PP-2 High Pressure Flare	NO <sub>x</sub>	0.03	0.14
		CO	0.28	1.22
		SO <sub>2</sub>	<0.01	<0.01
238FL330A	PP-2 High Pressure Flare	NO <sub>x</sub>	0.03	0.14
		CO	0.28	1.22
		SO <sub>2</sub>	<0.01	<0.01
FUGS	Plant Fugitives (5)	CO	0.90	3.70
		VOC	14.21	62.23
MSSATM	MSS Activities to Atmosphere	VOC (MSS)	387.60	3.87
PROCBINSYS	Process Area Bins and Systems	PM	0.87	3.79
		PM <sub>2.5</sub>	0.87	3.79
		PM <sub>10</sub>	0.87	3.79
RCU-HOSE	Propylene Unloading Rack Hose Disconnects	VOC	1.08	1.11
RCUMMSF	Propylene Unloading Rack Flare	NO <sub>x</sub> (MSS)	9.20	0.09
		CO (MSS)	36.66	0.17
		VOC (MSS)	67.76	0.63

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
TECHLAB	Tech Lab	VOC	0.06 (6)	0.25
		Acetone	0.06	0.25
SYNTHFUGS	Synthesis Area Particulate Fugitives	PM	2.12	5.60
		PM <sub>2.5</sub>	2.12	5.60
		PM <sub>10</sub>	2.12	5.60

- (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<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
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) The maximum VOC emission rate in any one hour from these sources is 5.00 lb/hr.
- (7) The combined limit includes pilot gas emissions from both flares and emissions from controlling vent gas streams.
- (8) The propylene unloading rack MSS flare cannot be operated if two reactors are being purged simultaneously to the Low Pressure Flares at the Synthesis Unit.

Date: March 15, 2017