

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 37884

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)
OC4BH1	Area 800 Filter Stack	PM	4.05	0.08
		PM <sub>10</sub>	4.05	0.08
		PM <sub>2.5</sub>	4.05	0.08
		Dichloromethane	0.10	0.43
OC4CLCY911/ OC4CLCY912/ OC4CLCY913	Area 900 Cyclone Separator Vent	PM	0.05	0.11
		PM <sub>10</sub>	0.05	0.11
		PM <sub>2.5</sub>	0.05	0.11
		Dichloromethane	0.10	0.43
OC4CT600	Cooling Tower	VOC (6)	0.83	3.62
		Ethylene	0.17	0.72
		Propylene	0.66	2.89
		PM	0.61	2.67
		PM <sub>10</sub>	0.26	1.16
		PM <sub>2.5</sub>	<0.01	<0.01
OC4FU01	Fugitive Emissions (5)	VOC (6)	1.71	7.49
		Ethylene	0.49	2.16
		Propylene	1.14	5.01
OC4FVSD1/ OC4LR1/ OC4PT901A/ OC4PT901B/ OC4PT902A/ OC4PT902B	Spin Dryer SD-1 Railcar Loading Blender D-901A Blender D-901B Blender D-902A Blender D-902B Emissions from Pellet Handling	VOC (6)	4.60	6.19
		Propylene	0.63	2.16
		Acetone	2.89	2.93
		Dichloromethane	0.10	0.43
OC4LR607	Waste Mineral Oil Loading	VOC	0.02	0.01
OC4PP0803	Pellet Silo	VOC (6)	<0.01	<0.01
		Propylene	<0.01	<0.01

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OC4RT704A/ OC4RT704B	CO Removal Tower	VOC (6)	0.01	<0.01
		Ethylene	0.01	<0.01
OC4SC502	Compressor 502	VOC (6)	0.70	0.72
		Propylene	0.70	0.72
OC4SC801	Pneumatic Conveyance System, C-801	VOC (6)	<0.01	<0.01
		Propylene	<0.01	<0.01
		Dichloromethane	0.10	0.43
OC4STD810	Peroxide Storage	VOC	0.03	<0.01
OC2F500/OC6F1	LHC8 Ground Flare GF-500 / LHC8 Elevated Flare FS-1 Group Cap (Normal Operation) (7)	NO <sub>x</sub>	24.08	3.06
		CO	122.72	15.60
		SO <sub>2</sub>	0.91	0.02
		VOC (6)	150.31	17.36
		Ethylene	2.07	0.28
		Propylene	147.89	17.01
ROUTINE MAINTENANCE, START-UP, AND SHUTDOWN EMISSIONS				
OC2F500/OC6F1	LHC8 Ground Flare GF-500 / LHC8 Elevated Flare FS-1 Group Cap (Maintenance, Start-up and Shutdown Operation) (7)	NO <sub>x</sub>	271.61	8.41
		CO	1384.00	42.85
		SO <sub>2</sub>	15.21	0.05
		VOC (6)	1509.39	49.57
		Ethylene	44.00	6.42
		Propylene	1459.54	43.00
MSS-FUG	MSS Fugitive Emissions	VOC (6)	35.45	0.34
		Ethylene	4.58	0.04
		Propylene	30.87	0.30

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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

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

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- 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 allowable total VOC emission rates include the listed ethylene and propylene emissions from this EPN.
- (7) The flare emissions authorized in this permit are only the emissions from Braskem America, Incorporated. Emissions resulting from the waste stream from Braskem America, Inc.'s Permit 37884 controlled by any of the flares that are authorized in The Dow Chemical Company's NSR Permit No. 20432 are authorized and reported by Braskem America, Inc.

Date: April 29, 2020