

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 19785

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. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
45A	V-812 Vent Filter	VOC	<0.001	<0.001
		PM ₁₀	<0.01	<0.01
45B	Silo Storage Vent	VOC	<0.001	<0.001
		PM ₁₀	<0.01	0.04
51	Flare	Ethylene (5)	6.01	3.91
		Butene (6)(13)	4.09	3.60
		Hexene (7)(13)	0.85	3.48
		2-Methyl-pentene (8)(13)	0.85	3.48
		Octene (9)(13)	1.37	5.70
		Ethane (10)	0.10	0.002
		Butane (10)	0.72	0.006
		Hexane (11)(14)	2.83	8.52
		NO _x	2.95	1.80
		CO	15.00	9.15
		SO ₂	0.40	0.35
53	Vent V-622/V-610	Butyl Chloride	<0.001	<0.001
54	Vent M-616	Hexane	<0.001	0.004
45	Purge Vent 474	VOC	0.16	0.70

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Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
46	Process Fugitives (4)	Ethylene	1.54	6.76
		Butene (12)	0.12	0.52
		Butane	0.04	0.16
		Hexane	0.54	2.36
		Butyl Chloride	0.010	0.056

- (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 General Rule 101.1.
 NO_x - total oxides of nitrogen.
 PM - particulate matter, suspended in the atmosphere, including PM₁₀.
 PM₁₀ - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
 SO₂ - sulfur dioxide.
 CO - carbon monoxide.
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Only 0.885 lb/hr are released on a continuous basis; 2.194 lbs are released once every 15 days; 0.12 lb are released once every 3.5 days; and 0.24 lb are released once every 30 days.
- (6) Only 0.818 lb/hr are released on a continuous basis; 1.625 lb are released once every 15 days; and 0.12 lb are released once every 3.5 days.
- (7) Only 0.793 lb/hr are released on a continuous basis; 0.052 lb are released every three days.
- (8) Only 0.793 lb/hr are released on a continuous basis; 0.052 lb are released every three days.
- (9) Only 1.30 lb/hr are released on a continuous basis; 0.069 lb are released every five days.
- (10) Original permit value doubled.

- (11) Only 1.94 lbs/hr are released on a continuous basis; 0.10 lb are released once every seven days; 0.198 lb are released twice every 30 days; 0.183 lb are released six times every 30 days; and 0.412 lb are released once every five days.
- (12) Butene values include comonomers, octene, hexene, and 3-methyl-pentene.
- (13) These values represent speciated emission value as if the individual comonomers were used for the full 8,760 hrs/year. In actuality, only one comonomer will be used at a time and expected emission increase will be no greater than 3.5 TPY.
- (14) Hexane will be used as a condensing media only.

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* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

_____ Hrs/day _____ Days/week _____ Weeks/year or 8,760 Hrs/year

Dated_____