

PP EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

EMISSION CAP TABLE

Permit No. 28351

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.

VOLATILE ORGANIC COMPOUNDS (VOCs) EMISSION CAP

<u>Emission Caps</u>	<u>lb/hr</u>	<u>TPY</u>
VOC Source Cap**	147.86	311.93
Hexane Source Cap	28.43	88.38
Isopentane Source Cap 3.30		1.06
Propane Source Cap	8.39	20.08
Propylene Source Cap 193.89		108.42
Ethylene Source Cap	3.08	11.46
Isobutane Source Cap 0.93		0.20
Pentane Source Cap	0.14	0.44

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PM Emission Cap

	lb/hr	TPY
PM Source Cap	2.31	6.85

Other Sources Not Included in the Cap:

Emission Point No.(1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates*	
			lb/hr	TPY
PP-B100	PP Boiler B-100	VOC	0.05	0.21
		NO _x	2.76	12.11
		SO ₂	0.01	0.05
		PM	0.16	0.69
		CO	0.60	2.62
PP-B102	PP Boiler B102	VOC	0.14	0.61
		NO _x	6.40	28.03
		SO ₂	0.03	0.13
		PM	0.24	1.05
		CO	1.63	7.14
PP-FLARE	Polypropylene Flare	NO _x	12.88	12.76
		CO	65.62	65.00
		SO ₂	0.10	

- (1) Emission Point Identification - Either specific equipment designation or emission point number (EPN) from a plot plan.
- (2) Specific Point Source Names. For fugitive sources use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in 30 Texas Administrative Code Section 101.1
- NO_x - total oxides of nitrogen
- SO₂ - sulfur dioxide
- 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.
- CO - carbon monoxide

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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

- ** VOC includes all speciated volatiles as shown.

Source Caps include the following Emission Point Numbers:

VOC

PP-A410 PP-CT100
PP-A420 PP-CT101
PP-A430 PP-ZSK1FV
PP-CVS PP-ZSK1DRY
PP-L3FUG PP-ZSK1STG
PP-FLARE PP-ZSK2FV
PP-WWDEGAS PP-ZSK2DRY
PP-ZSK2STG PP-CMPFV
PP-CMPDRY PP-CMPSTG
PP-LOAD PP-L3LOAD
PP-ZSK3DRY PP-ZSK3FV
PP-ZSK3STG

PM

PP-ZSK1FV
PP-ZSK1STG
PP-ZSK2FV
PP-ZSK2STG
PP-CMPFV
PP-CMPSTG
PP-LOAD
PPL3FV
PP-ZSK3FV
PP-ZSK3STG
PP-L3LOAD

Dated _____

PE EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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EMISSION CAPS [Before Cogen Units Start-up]

Emission Caps		lb/hr	TPY *
VOC Source Cap**		281.40	621.22
Ethylene Source Cap		108.95	114.60
Isobutane Source Cap			157.27
	482.69		
Hexene Source Cap		10.12	14.59
NO _x Source Cap		15.08	18.13
CO Source Cap		108.95	92.40
PM Source Cap		1.62	2.54
SO ₂ Source Cap		0.36	0.35
PE-B1	VOC	0.29	0.98
	NO _x 5.29	17.83	
	CO 4.44	14.98	
	PM 0.40	1.36	
	SO ₂ 0.03	0.11	
PE-B2	VOC	0.29	0.98
	NO _x 5.29	17.83	
	CO 4.44	14.98	
	PM 0.40	1.36	

SO₂ 0.03 0.11

EMISSION CAPS
[Before Cogen Units Start-up]

Emission Caps		lb/hr	TPY *
PE-B3	VOC	0.29	0.98
	NO _x	5.29	
	CO	4.44	
	PM	0.40	
	SO ₂	0.03	
PE-B4	VOC	0.41	1.39
	NO _x	7.49	
	CO	6.29	
	PM	0.57	
	SO ₂	0.04	
PE-B7	VOC	0.55	1.87
	NO _x	10.28	
	CO	8.46	
	PM	0.77	
	SO ₂	0.06	
PE-B9	VOC	2.55	11.17
	NO _x	12.20	
	CO	9.96	
	PM	0.56	
	SO ₂	1.75	
PE-B10	VOC	0.34	1.50
	NO _x	5.63	
	CO	4.2	
	PM	1.64	
	SO ₂	0.07	

* 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

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EMISSION CAPS

[After Cogen Units Start-up]

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VOC Source Cap**		281.40	621.22
Ethylene Source Cap		108.95	114.60
Isobutane Source Cap			157.27
	482.69		
Hexene Source Cap		10.12	14.59
NO _x Source Cap		15.08	18.13
CO Source Cap		108.95	92.40
PM Source Cap		1.62	2.54
SO ₂ Source Cap		0.36	0.35
PE-HSRG1	VOC	2.57	5.25
	NO _x	9.45	24.96
	CO	13.46	40.10
	PM	1.28	3.49
	SO ₂	0.41	1.15
PE-HSRG2	VOC	2.57	5.25
	NO _x	9.45	24.96
	CO	13.46	40.10
	PM	1.28	3.49
	SO ₂	0.41	1.15

PE-HSRG3	VOC	2.57	5.25
	NO _x	9.45	24.96
	CO	13.46	40.10
	PM	1.28	3.49
	SO ₂	0.41	1.15

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EMISSION CAPS

[After Cogen Units Start-up]

Emission Point No.(1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates*	
			lb/hr	TPY
PE-HSRG4		VOC	2.57	5.25
		NO _x	9.45	24.96
		CO	13.46	40.10
		PM	1.28	3.49
		SO ₂	0.41	1.15
PE-GTUV1		VOC	0.06	0.27
PE-GTUV2		VOC	0.06	0.27
PE-GTUV3		VOC	0.06	0.27
PE-GTUV4		VOC	0.06	0.27
PE-HRSGFE1		VOC	0.16	0.71

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Source Caps include the following Emission Point Numbers:

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VOC

PE Finishing	PE Finishing	PE Cooling Towers	PE Flares	PE Fugitive
PE-CM7DRY	PE-FCM2STG	PE-CT1	PE-FLARE	PE-A50
PE-CM7STG	PE-FCM3DRY	PE-CT2A		PE-AR702
PE-CM8VNT	PE-FCM3STG	PE-CT2B		PE-A130A
PE-CM8DRY	PE-FCM4DRY	PE-CT3		PE-A130B
PE-CM8CARB	PE-FCM4STG			PE-A130C
PE-CM10FV	PE-FCM5DRY			PE-A150
PE-CM10DRY	PE-FCM5STG			PE-A160
PE-CM10STG	PE-FCM6FV			PE-AMTRYD
PE-FCM1DRY	PE-FCM6DRY			PE-ERU
PE-FCM1STG	PE-FCM6STG			PE-CVS
PE-FCM2DRY	PE-LOAD			

PM

PE Finishing	PE Finishing	PE Cooling Towers	PE Flares	PE Fugitive
PE-CM7DRY	PE-FCM2STG			
PE-CM7STG	PE-FCM3DRY			
PE-CM8VNT	PE-FCM3STG			
PE-CM8DRY	PE-FCM4DRY			
PE-CM8CARB	PE-FCM4STG			
PE-CM10FV	PE-FCM5DRY			
PE-CM10DRY	PE-FCM5STG			
PE-CM10STG	PE-FCM6FV			
PE-FCM1DRY	PE-FCM6DRY			
PE-FCM1STG	PE-FCM6STG			
PE-FCM2DRY	PE-LOAD			

NO_x, CO, and SO₂

PE Finishing	PE Finishing	PE Cooling Towers	PE Flares	PE Fugitive
			PE-FLARE	

Dated _____