

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 160710

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)
H-601A	WEG Heater – Train 1	VOC	0.16	0.70
		NO <sub>x</sub>	0.89	3.90
		CO	0.89	3.90
		PM	0.22	0.97
		PM <sub>10</sub>	0.22	0.97
		PM <sub>2.5</sub>	0.22	0.97
		SO <sub>2</sub>	0.02	0.08
H-601B	WEG Heater – Train 2	VOC	0.16	0.70
		NO <sub>x</sub>	0.89	3.90
		CO	0.89	3.90
		PM	0.22	0.97
		PM <sub>10</sub>	0.22	0.97
		PM <sub>2.5</sub>	0.22	0.97
		SO <sub>2</sub>	0.02	0.08
H101	Regeneration Heater – Train 1	VOC	0.25	1.11
		NO <sub>x</sub>	1.40	6.15
		CO	1.76	7.69
		PM	0.35	1.53
		PM <sub>10</sub>	0.35	1.53
		PM <sub>2.5</sub>	0.35	1.53
		SO <sub>2</sub>	0.03	0.12
H201	Regeneration Heater – Train 2	VOC	0.13	0.59
		NO <sub>x</sub>	0.75	3.29
		CO	0.80	3.50

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		PM	0.13	0.55
		PM <sub>10</sub>	0.13	0.55
		PM <sub>2.5</sub>	0.13	0.55
		SO <sub>2</sub>	0.01	0.06
H301	Regeneration Heater – Train 3	VOC	0.19	0.83
		NO <sub>x</sub>	1.05	4.61
		CO	1.05	4.61
		PM	0.18	0.77
		PM <sub>10</sub>	0.18	0.77
		PM <sub>2.5</sub>	0.18	0.77
		SO <sub>2</sub>	0.02	0.09
H401	Regeneration Heater – Train 4	VOC	0.22	0.94
		NO <sub>x</sub>	1.20	5.26
		CO	1.20	5.26
		PM	0.20	0.88
		PM <sub>10</sub>	0.20	0.88
		PM <sub>2.5</sub>	0.20	0.88
		SO <sub>2</sub>	0.02	0.1
H501	Regeneration Heater – Train 5	VOC	0.22	0.94
		NO <sub>x</sub>	1.20	5.26
		CO	1.20	5.26
		PM	0.20	0.88
		PM <sub>10</sub>	0.20	0.88
		PM <sub>2.5</sub>	0.20	0.88
		SO <sub>2</sub>	0.02	0.1
1-COOLTWR1	Cooling Tower – Train 1	VOC	1.08	0.47
		PM	0.49	2.13
		PM <sub>10</sub>	0.02	0.1
		PM <sub>2.5</sub>	<0.01	<0.01

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2-COOLTWR1	Cooling Tower – Train 2	VOC	1.44	0.63
		PM	0.32	1.42
		PM <sub>10</sub>	0.01	0.07
		PM <sub>2.5</sub>	<0.01	<0.01
3-COOLTWR1	Cooling Tower – Train 3	VOC	0.44	0.19
		PM	0.10	0.43
		PM <sub>10</sub>	<0.01	0.02
		PM <sub>2.5</sub>	<0.01	<0.01
4-COOLTWR1	Cooling Tower – Train 4	VOC	1.44	0.63
		PM	0.32	1.42
		PM <sub>10</sub>	0.01	0.07
		PM <sub>2.5</sub>	<0.01	<0.01
5-COOLTWR1	Cooling Tower – Train 5	VOC	1.44	0.63
		PM	0.32	1.42
		PM <sub>10</sub>	0.01	0.07
		PM <sub>2.5</sub>	<0.01	<0.01
EG-Z801a	Emergency Generator 1 – Train 1	VOC	0.36	0.01
		NO <sub>x</sub>	0.09	<0.01
		CO	0.36	0.01
		PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
		SO <sub>2</sub>	<0.01	<0.01
EG-Z801b	Emergency Generator 2 – Train 1	VOC	0.56	0.01
		NO <sub>x</sub>	0.14	<0.01
		CO	0.85	0.02
		PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01

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		SO <sub>2</sub>	<0.01	<0.01
EG-Z801c	Emergency Generator – Train 2	VOC	0.41	0.02
		NO <sub>x</sub>	0.10	0.01
		CO	0.41	0.02
		PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
		SO <sub>2</sub>	<0.01	<0.01
EG-Z801d	Emergency Generator – Train 4	VOC	0.41	0.02
		NO <sub>x</sub>	0.10	0.01
		CO	0.41	0.02
		PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
		SO <sub>2</sub>	<0.01	<0.01
EG-Z801e	Emergency Generator – Train 5	VOC	0.41	0.02
		NO <sub>x</sub>	0.10	0.01
		CO	0.41	0.02
		PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
		SO <sub>2</sub>	<0.01	<0.01

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
EG-Z801f	Emergency Generator – Train 3	VOC	0.41	0.02
		NO <sub>x</sub>	0.10	0.01
		CO	0.41	0.02
		PM	<0.01	<0.01

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		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
		SO <sub>2</sub>	<0.01	<0.01
1-FUG	Equipment Fugitives – Train 1 (5)	VOC	3.56	15.60
2-FUG	Equipment Fugitives – Train 2 (5)	VOC	1.10	4.84
3-FUG	Equipment Fugitives – Train 3 (5)	VOC	3.56	15.60
4-FUG	Equipment Fugitives – Train 4 (5)	VOC	3.56	15.60
5-FUG	Equipment Fugitives – Train 5 (5)	VOC	3.56	15.60
LPGFLARE	Flare – Routine and MSS	VOC	839.26	46.43
		NO <sub>x</sub>	382.96	18.14
		CO	764.54	36.21
		SO <sub>2</sub>	0.04	<0.01
PFLARE-MSS	Portable Flare Emissions - MSS	VOC	302.85	21.28
		NO <sub>x</sub>	106.02	4.53
		CO	211.65	9.04
		SO <sub>2</sub>	0.02	<0.01
MSS-ATM	Atmospheric MSS	VOC	270.50	3.43

- (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  
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.

Date: January 6, 2021