## Emission Sources - Maximum Allowable Emission Rates

## Permit Number 87575 and N116

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)
SMRSTACK	Reformer Combustion Stack Normal	NOx	26.03	24.70
	Operations	со	16.55	60.42
		voc	2.50	9.12
		PM	7.81	28.50
		PM <sub>2.5</sub>	7.81	28.50
		PM <sub>10</sub>	7.81	28.50
		SO <sub>2</sub>	0.84	1.85
		NH₃	5.04	18.39
SMRSTACK	Reformer Combustion Stack MSS Activities	NOx	152.09	8.55
	Stack W33 Activities	со	118.09	6.83
		voc	_	_
		PM	_	_
		PM <sub>2.5</sub>	_	_
		PM <sub>10</sub>	_	_
		SO <sub>2</sub>	_	_
		NH <sub>3</sub>	10.64	0.59
FLARE	Process Flare Normal Operations	NOx	64.93	1.09
	Operations	со	0.13	0.56
		voc	0.01	0.04
		SO <sub>2</sub>	<0.01	<0.01
		NH <sub>3</sub>	0.49	<0.01

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FLARE	Reformer Combustion Stack MSS Activities	NOx	95.13	3.40
	Stack MSS Activities	СО	532.21	12.62
		voc	6.98	0.02
		SO <sub>2</sub>	0.62	<0.01
		NH <sub>3</sub>	_	_
DAVENT1	Export Steam Deaerator	VOC	0.04	0.16
	Vent Normal Operations	NH <sub>3</sub>	0.01	0.03
DAVENT2	Export Steam Deaerator	VOC	4.86	0.35
	Vent Normal Operations	NH₃	0.26	0.02
BDVENT	Steam Blowdown Vent Normal	VOC	9.00	2.59
	Operations	NH <sub>3</sub>	0.01	<0.01
BDVENT	Steam Blowdown Vent MSS Activities	voc	1.62	0.07
	Vent M33 Activities	NH <sub>3</sub>	<0.01	<0.01
СТ	Cooling Tower	VOC	0.01	0.07
		РМ	0.44	1.93
		PM <sub>2.5</sub>	0.44	1.93
		PM <sub>10</sub>	0.44	1.93
FUG	Process Fugitive Emissions (6)	со	1.62	7.11
	Emissions (0)	voc	0.56	2.48
NH₃FUG	Ammonia System Fugitive Emissions	NH <sub>3</sub>	0.53	1.37
GLYCOLTNK	Glycol Storage Tank	voc	<0.01	<0.01
BDSUMP	Steam System Blowdown Sump	voc	0.46	2.03
	Normal Operations	NH <sub>3</sub>	0.05	0.23
STMVNT1	Export Steam Vent MSS Activities	VOC	0.92	0.14
	West Activities	NH <sub>3</sub>	0.17	0.02
STMVNT2	Process Steam Vent MSS Activities	VOC	0.40	0.03
	THOS / TOUVINGS	NH <sub>3</sub>	0.08	0.01

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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) 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

HRVOC - highly reactive volatile organic compounds as defined in 30 TAC § 115.10

IOC-U - inorganic compounds (unspeciated)

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

HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of

Federal Regulations Part 63, Subpart C

(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) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

Date: July 31, 2020
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