## Emission Sources - Maximum Allowable Emission Rates

## Permit Number 5040

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

<b>Emission Point No. (1)</b>	Source Name (2)	Air Contaminant Name (3)	Emission	Rates
			lbs/hour	TPY (4)
AACT	South Cooling Tower	voc	3.36	14.72
		РМ	1.80	6.58
		PM <sub>10</sub>	1.14	4.18
		PM <sub>2.5</sub>	0.39	1.40
AASCV5118	Tank 5118 Scrubber	voc		
AASCV5129	Tank 5129 Scrubber	voc		
AASCV5238	Tank 5238 Scrubber	voc		
AASCV5118 AASCV5129 AASCV5238	Tank Group Cap	VOC (6) VOC (6)	7.43 7.43 (10)	3.37 1.31 (10)
AASCV5251	Tank 5251 Scrubber	voc		
AASCV5252	Tank 5252 Scrubber	voc		
AASCV5315	Tank 5315 Scrubber	voc		
AASCV5251 AASCV5252 AASCV5315	Tank Group Cap	VOC (6) VOC (6)	9.85 3.94 (9)	1.46 0.58 (9)
AAV5258	Seal Fluid Tank	voc	0.02	0.01
AAV5267	Tank 5267	voc	1.13	1.18
AAV5281	Diesel Tank 5281	voc	0.02	0.01
AAV5282	Diesel Tank 5282	voc	0.02	0.01
AAV5209	Tank 5209	voc	0.37	
AAV5210	Tank 5210	voc	0.37	
AAV5209 AAV5210	Tank Group Cap	VOC		0.88
AAV5312	Tank 5312	voc	0.22	0.74
		Methyl Acetate	0.51	1.62
AABLOSS	Barge Loading Losses	voc	7.63	2.87
AABFUG	Barge Piping Fugitives (5)	voc	0.01	0.04

Project Number: 268903

## Emission Sources - Maximum Allowable Emission Rates

AARTSC	Truck/Rail Loading	voc	7.78	0.72
AATRLOSS	Truck/Rail Loading Losses	voc	8.19	0.76
AASLOSS	Railcar Sampling Losses	voc	3.87	0.14
AARTFUG	Truck/Rail Piping Fugitives (5)	voc	0.03	0.15
AATFFUG	Tank Farm Fugitives (5)	voc	0.24	1.06
AAFUG	Process Fugitives (5)	voc	0.73	3.20
		Chlorine	0.01	0.01
		со	0.23	1.01
AALHW	Waste Acid Fugitives	voc	0.35	0.02
AAFLARE	AA Flare (8)	voc	16.10	4.99
		Methyl Acetate	0.04	0.09
		NO <sub>x</sub>	4.70	3.27
		со	125.72	41.98
		SO <sub>2</sub>	0.72	1.18
PWW5206	240-HP Emergency Pump Engine (7)	voc	0.39	0.17
	Tump Engine (1)	NO <sub>x</sub>	7.44	3.18
		со	1.60	0.68
		PM	0.53	0.22
		PM <sub>10</sub>	0.53	0.22
		PM <sub>2.5</sub>	0.53	0.22
		SO <sub>2</sub>	0.49	0.21
PWW5259	240-HP Emergency Generator Engine (7)	voc	0.39	0.17
	Generator Engine (1)	NO <sub>x</sub>	7.44	3.18
		СО	1.60	0.68
		PM	0.53	0.22
		PM <sub>10</sub>	0.53	0.22
		PM <sub>2.5</sub>	0.53	0.22
		SO <sub>2</sub>	0.49	0.21

Project Number: 268903

## Emission Sources - Maximum Allowable Emission Rates

ALKTOTE	Alkanes Tote	voc	0.01	0.01
RHTOTE	Rhodium Tote	voc	0.02	0.08
VACTHR_SYS1	AA Flare Analyzer	voc	0.01	0.02
		со	0.01	0.01
		NO <sub>x</sub>	0.01	0.01

- (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 CO - carbon monoxide

PM - total particulate matter, suspended in the atmosphere, including  $PM_{10}$  and  $PM_{2.5}$  - particulate matter equal to or less than 10 microns in diameter, including  $PM_{2.5}$ 

PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter

SO<sub>2</sub> - sulfur dioxide

- (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) Emission rate limits are for the combined total of all tanks in the tank group.
- (7) These emission rates authorize routine testing of equipment. Rates are based on 850 hours per year.
- (8) Permit 18899 authorizes additional streams that are vented to the AA Flare. The corresponding emissions are included in Permit 18899.
- (9) These emission limits become effective upon replacement of the scrubbers with more efficient units. These replacements were authorized by Standard Permit 152453.
- (10)These emission limits become effective upon replacement of the scrubbers with more efficient units. These replacements were authorized by Standard Permit 145060.

Date:	October 8, 2018	

Project Number: 268903