Emission Sources - Maximum Allowable Emission Rates

Permit Number 53313

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.	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
(1)			lbs/hour	TPY (4)
49T149ST 49T149TEMP (6)	Acetic Acid Scrubber T-149 or Temporary Acetic Acid Scrubber	HAc	4.35	2.63
49V578ST	Acetic Acid Scavenger Tank	HAc	0.53	0.01
49V598ST	Personnel Exposure Control Dev	voc	1.19	0.04
		н	0.06	0.01
			0.16	0.01
		Methyl acetate	0.14	0.01
49V604ST	Steam Condensate Tank	voc	0.01	0.01
49V1049ST	Acetic Acid Storage Tank	voc	0.56	0.33
49V1195ST	Methyl Acetate Storage Tank	voc	0.24	0.54
		Methyl acetate	1.30	3.83
49MN138ST	Acetic Acid Unit Flare	voc	26.71	7.15
		NO _x	7.77	3.06
		со	240.92	88.42
		SO ₂	0.15	0.31
		Methyl acetate	5.36	0.02
		12	12.73	1.93
		Н	12.83	1.94
49HACLDFUG	Acetic Acid Railcar/ Truck Uncollected Loading Losses	voc	0.69	0.11

Project Number: 174249

Emission Sources - Maximum Allowable Emission Rates

Acetic Acid Unit Equipment Fugitives (5)	voc	2.73	11.98
	СО	0.49	2.13
	Methyl acetate	0.78	3.43
Analyzer Vents	voc	0.01	2.13
	со	0.01	0.01
Cooling Tower (5)	voc	2.94	12.88
Methyl Acetate	voc	0.60	2.62
Recovery Tower	Methyl acetate	2.58	11.29
Methyl Acetate	VOC	0.20	0.74
Storage Tank	Methyl acetate	1.36	5.43
Methanol Scrubber or Temporary Methanol Scrubber	VOC	10.69	4.65
Stand Alone Cooling Tower (5)	voc	0.50	2.21
	PM/PM10/PM2.5	0.15	0.66
Thermal Oxidizer	NO _x	15.79	12.22
	со	21.29	18.56
	VOC	0.28	0.34
	SO ₂	0.43	0.1
	PM/PM ₁₀ /PM _{2.5}	2.64	4.62
	12	7.48	11.07
	HI	7.53	11.16
	Equipment Fugitives (5) Analyzer Vents Cooling Tower (5) Methyl Acetate Recovery Tower Methyl Acetate Storage Tank Methanol Scrubber or Temporary Methanol Scrubber Stand Alone Cooling Tower (5)	Equipment Fugitives (5) CO Methyl acetate VOC CO Cooling Tower (5) Methyl Acetate Recovery Tower Methyl Acetate Storage Tank Methyl acetate Methyl acetate VOC Methyl acetate VOC Methyl acetate VOC Methyl ac	Equipment Fugitives (5)

⁽¹⁾ Emission point identification - either specific equipment designation or emission point number from plot plan.

(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

Project Number: 174249

⁽²⁾ Specific point source name. For fugitive sources, use area name or fugitive source name.

Emission Sources - Maximum Allowable Emission Rates

 PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as

represented

PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

 $\begin{array}{ccc} \text{HAc} & & \text{- acetic acid} \\ \text{I}_2 & & \text{- Iodine} \end{array}$

HI - Hydrogen Iodide

(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) 49T149TEMP is a temporary scrubber to be used when the regular scrubber 49T149ST is out of service. Total emissions from EPNs 49T149ST and 49T149TEMP shall not exceed the given limits. The scrubbers shall not operate simultaneously except when transitioning.
- (7) 55T43TEMP is a temporary scrubber to be used when the regular scrubber 55T43ST is out of service. Total annual emissions from EPNs 55T43ST and 55T43TEMP shall not exceed the given limits. The scrubbers shall not operate simultaneously except when transitioning.

Date: August 31, 2012	
-----------------------	--

Project Number: 174249