

Emission Sources - Maximum Allowable Emission Rates

Permit Number 978B

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)
EK-120	TCB Storage Tank	1,2,4-TCB	0.04	0.01
EK-212	BAPMA Storage Tank (J-212, J-214, J-215, and J-216) Water Scrubber	Amine	0.01	<0.01
ED-565	Dicamba Flaker Absorber	Dicamba	0.032	0.14
EC-568	Dicamba Bag Loading Dust Collector	PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
EA-506	D-505 Scrubber	Dicamba	1.73	7.58
ED-300A	Vent Scrubber (Tank J-300)	HCl	0.068	<0.01
ED-300	HCl Unloading	HCl	0.04	0.051
EB-141	Tank Scrubber (HCl Tanks)	HCl	0.32	0.11
ED-206A	Vent Absorber (Tank J-206) (6)	Dimethyl amine	0.34	0.033
ED-206B	D-206B Vent Absorber (Tank J-205)	Diglycol amine	<0.01	<0.01

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Boiler-Cap	Boiler Emissions Cap (EB-2, EB-4, and EB-5) (9)	PM ₁₀	1.66	7.27
		PM _{2.5}	1.66	7.27
		NO _x	15.21	66.61
		CO	11.55	30.57
		VOC	1.06	4.66
		SO ₂	0.12	0.50
EB-2	Boiler No. 2	PM ₁₀	0.72	3.16
		PM _{2.5}	0.72	3.16
		NO _x	9.40	41.17
		CO	7.97	14.89
		VOC	0.52	2.29
		SO ₂	0.06	0.25
EB-4	Boiler No. 4	PM ₁₀	0.94	4.11
		PM _{2.5}	0.94	4.11
		NO _x	5.81	25.44
		CO	3.28	14.37
		VOC	0.54	2.37
		SO ₂	0.06	0.25
EB-5	Boiler No. 5	PM ₁₀	0.72	3.16
		PM _{2.5}	0.72	3.16
		NO _x	0.97	4.24
		CO	3.58	15.68
		VOC	0.52	2.29
		SO ₂	0.06	0.25

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EK-275	Dicamba Unit Fume Burner	HCl	1.99	2.19
		Cl ₂	0.02	0.01
		NO _x	0.375	1.64
		MeOH	0.705	0.03
		CH ₃ Cl	0.15	<0.01
		1,2,4-TCB	0.02	<0.01
		PM ₁₀	0.029	0.125
		PM _{2.5}	0.029	0.125
		CO	0.32	1.38
		SO ₂	<0.01	0.01
		Xylene	0.21	0.05
		Diethylene triamine	<0.01	<0.01
		Dimethyl amine	0.94	0.03
		Diglycol amine	<0.01	<0.01
		Dicamba	<0.01	<0.01
		VOC	2.05	0.11
		NaOH	0.03	<0.01
		KOH	0.02	<0.01
		Dichlorophenol	0.01	<0.01
		BAPMA	<0.01	<0.01
		Butanol-(1)	<0.01	<0.01
		Alkylated Naphthalene	<0.01	<0.01
		Sodium Sulfate	<0.01	0.01

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EK-203	K-203 Flare	HCl	<0.01	<0.01
		Dimethyl ether	9.67	37.80
		MeOH	0.71	2.76
		Xylene	0.013	0.052
		CH ₃ Cl	0.037	0.14
		NO _x	0.93	3.64
		CO	7.97	31.20
FUG	Dicamba Process Fugitives (5)	Xylene	0.01	0.03
		MeOH	0.074	0.32
		1,2,4-TCB	0.52	2.28
		CH ₃ Cl	0.26	1.14
		HCl	0.47	2.04
ED-107	Tank J-107 Vent	VOC	0.014	0.013
		MeOH	0.014	0.013
		Sodium Dichlorophenol	<0.0001	<0.0001
		NaCL	<0.01	<0.01
		NaOH	<0.01	<0.01
EWV-TR3	North Wastewater Tank Farm	VOC	0.005	0.03
COOLTWR	Cooling Tower (5)	VOC	0.28	1.21
		PM ₁₀	0.63	2.74
		PM _{2.5}	0.63	2.74
PLANNED MAINTENANCE, STARTUP, AND SHUT DOWN (MSS) ACTIVITIES				
EK-203	K-203 Flare	VOC (7)	105.29	0.45
		NO _x	3.84	0.02
		CO	15.31	0.07

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EK-275	Dicamba Unit Fume Burner	VOC (7)	3.75	0.01
EK-120	TCB Storage Tank CAS	VOC (7)	0.03	0.01
EK-212	BAPMA Storage Tank (J-212, J-214, J-215, and J-216) Water Scrubber	Amine	0.01	0.01
ED-206A	Vent Absorber (Tank J-206)	VOC (7)	0.02	0.01
ED-206B	D-206B Vent Absorber (Tank J-205)	VOC (7)	0.01	0.01
ED-300	HCl Unloading	HCl	0.07	0.01
ED-300A	Vent Scrubber (Tank J-300)	HCl	0.35	0.01
MSSDICAM	Compressors	VOC (7)	1.74	(8)
MSSDICAM	Filter Purging	VOC (7)	0.22	(8)
MSSDICAM	Loading Rack	VOC (7)	0.40	(8)
MSSDICAM	Pumps A-204 C & D	VOC (7)	1.85	(8)
MSSDICAM	Tank Breathing	VOC (7)	0.01	(8)
MSSDICAM	Tank Fume Burner	VOC (7)	0.75	(8)
MSSDICAM	Tank Inspections	VOC (7)	11.16	(8)
MSSDICAM	Vacuum Trucks	VOC (7)	0.01	(8)
MSSDICAM	Wastewater Tank	VOC (7)	0.19	(8)
MSSDICAM	Uncontrolled Emission Caps	VOC (7)		0.11

(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) 1,2,4-TCB - 1,2,4 trichlorobenzene
 Dicamba - 3,6 dichloro-o-anisic acid (and isomers)
 HCl - hydrogen chloride
 Cl₂ - chlorine
 NO_x - total oxides of nitrogen

Emission Sources - Maximum Allowable Emission Rates

PM	-	total particulate matter, suspended in the atmosphere, including PM ₁₀ and PM _{2.5} , as represented
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
SO ₂	-	sulfur dioxide
VOC	-	volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
MeOH	-	methanol
CH ₃ Cl	-	methyl chloride
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) Operations are limited to 200 hours per year.
- (7) Total VOC is inclusive of all speciated emission rates.
- (8) Annual Cap of all uncontrolled MSS emissions
- (9) EPN Bailer-Cap caps the combined emissions for EPNs EB-2, EB-4, and EB-5 to the sum of the highest two emission rates for any of these boilers.

Date: August 7, 2013