Emission Sources - Maximum Allowable Emission Rates

Permit Number 9395

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)
E-AB1	Loading Spot No. AB1 (7)	MPG	1.30	0.39
E-AB2	Loading Spot No. AB2 (7)	MPG	1.30	0.39
E-ANALYZER	Process Analyzers	VOC	0.79	1.73
		NO_x	0.01	0.01
		CO	0.01	0.02
		Acetone	0.10	0.33
E-B801N&S	Hot Oil Heater B801 (note this heater has two stacks, North & South, rates are for the combined emission)	VOC	0.68	2.38
		NO_x	12.38	43.22
		CO	10.40	36.31
		PM_{10}	0.94	3.29
		SO_2	1.86	0.26
E-B901	Process Heater B-901	VOC	0.10	0.34
		NO_x	1.82	6.12
		CO	1.53	5.14
		PM_{10}	0.14	0.47
		SO_2	0.27	0.04
E-B902A	Process Heater B902A	VOC	0.09	0.32
		NO_x	1.71	5.84
		CO	1.43	4.91
		PM_{10}	0.13	0.44
		SO_2	0.26	0.04

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E-B902B	Process Heater B902B	VOC	0.08	0.28
		NO_x	1.49	5.15
		CO	1.25	4.33
		PM_{10}	0.11	0.39
		SO_2	0.22	0.03
E-B902C	Process Heater 902C	VOC	0.07	0.23
		NO_x	1.24	4.21
		CO	1.04	3.53
		PM_{10}	0.09	0.32
		SO_2	0.19	0.03
E-B1550	Flare	VOC	342.74	74.09
		NO_x	68.71	27.15
		CO	357.28	141.19
		SO_2	6.14	0.22
		Acetone	30.00	15.39
E-B1501A	Emergency Flare Plant 1 Pilot	NO_x	0.04	0.16
		CO	0.07	0.32
		SO_2	< 0.01	0.02
	Process Flare Backup (6)	VOC	60.79	7.29
		NO_x	7.95	0.95
		CO	68.14	8.18
		SO_2	6.14	0.03
		Acetone	3.51	0.42
E-B1501B	Emergency Flare Plant 2 Pilot	NO_x	0.03	0.13
		CO	0.06	0.25

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		SO_2	< 0.01	0.01
	Process Flare Backup (6)	VOC	60.79	7.29
		NO_x	7.95	0.95
		CO	68.14	8.18
		SO_2	6.14	0.03
		Acetone	3.51	0.42
E-B1501C	Emergency Flare Plant 3 Pilot	NO_x	0.03	0.13
		CO	0.06	0.25
		SO_2	< 0.01	< 0.01
	Process Flare Backup (6)	VOC	60.79	7.29
		NO_x	7.95	0.95
		CO	68.14	8.18
		SO_2	6.14	0.03
		Acetone	3.51	0.42
E-B1751	Hot Oil Heater B1751	VOC	0.08	0.29
		NO_x	1.44	5.26
		CO	1.21	4.42
		PM_{10}	0.11	0.40
		SO_2	0.22	0.03
E-B2890	Hot Oil Heater B2890	VOC	0.45	1.57
		NO_x	8.21	28.54
		CO	6.90	23.97
		PM_{10}	0.62	2.17
		SO_2	1.23	0.17
E-BLOFUG	PO/TBA & Derivative Fugitives (5)	VOC	52.57	194.54
		CO	0.39	1.42
		Acetone	1.86	6.95
E-CD4A	Loading Spot No. CD4A (7)	DPG	0.75	0.19

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E-CD5B	Loading Spot No. CD5B	MPG	0.54	0.16
E-CD6A	Loading Spot No. CD6A	MPG	0.54	0.16
E-CTC	Cooling Tower Chemicals Storage Inhibitor and Dispersant	Additives	3.27	0.02
E-Engine	Diesel Engines (7)	VOC	10.48	6.57
		NO_x	95.47	40.29
		CO	26.97	15.75
		PM_{10}	9.19	5.76
		SO_2	8.56	5.36
E-F551	Tank No. F551	Propylene Carbonate	< 0.01	< 0.01
E-F1005B	Tank No. F1005B	PG	0.27	<0.01
E-F1005C	Tank No. F1005C	PG	0.27	< 0.01
E-F1101A	Tank No. F1101A	DPG	0.34	0.06
E-F1101B	Tank No. F1101B	DPG	0.34	0.06
E-F1101C	Tank No. F1101C	PGME	4.92	1.74
E-F1101D	Tank No. F1101D	PGME	4.92	1.74
E-F1102A	Tank No. F1102A	MPG	4.17	0.18
E-F1102B	Tank No. F1102B	MPG	4.17	0.18
E-F1102C	Tank No. F1102C	MPG	4.17	0.18
E-F1102D	Tank No. F1102D	PG	3.44	0.10
E-F1103A	Tank No. F1103A	DPM	0.47	0.05
E-F1103B	Tank No. F1103B	DPM	0.47	0.05
E-F1103C	Tank No. F1103C	TPG	0.26	< 0.01
E-F1103D	Tank No. F1103D	TPG	0.26	< 0.01
E-F1104A	Tank No. F1104A	PG	4.04	0.01
E-F1104B	Tank No. F1104B	PG	4.04	0.01
E-F1104C	Tank No. F1104C	DPG	0.90	0.55
E-F1105A	Tank No. F1105A	PG	5.29	0.74
E-F1105B	Tank No. F1105B	PG	5.29	0.74
E-F1108A	Tank No. F1108A	DPM Bottoms	0.17	0.07

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E-F1109	Tank No. F1109	TPG Bottoms	0.38	0.02
E-F1110	Tank No. F1110	DPG	0.35	0.07
E-F1164	Tank No. F1164	DPM	9.13	0.14
E-F1204	Tank No. F1204	Caustic	0.10	< 0.01
E-F1205	Tank No. F1205	Caustic	0.02	< 0.01
E-F1280	Tank No. F1280	TPG	0.02	0.004
E-F1411	Tank No. F1411	Diesel	0.04	< 0.01
E-F1412	Tank No. F1412	Diesel	0.04	< 0.01
E-F1413	Tank No. F1413	Diesel	0.08	< 0.01
E-F1414	Tank No. F1414	Diesel	0.08	< 0.01
E-F1415	Tank No. F1415	Diesel	0.08	< 0.01
E-F1418	Tank No. F1418	Diesel	0.42	< 0.01
E-F1419	Tank No. F1419	Gasoline	75.84	0.98
E-F1455A	Tank No. F1455A	Diesel	0.04	< 0.01
E-F1455B	Tank No. F1455B	Diesel	0.04	< 0.01
E-F1457A	Tank No. F1457A	Diesel	0.04	< 0.01
E-F1457B	Tank No. F1457B	Diesel	0.04	< 0.01
E-F1503B	Tank No. F1503B	Caustic	< 0.01	< 0.01
E-F1740	Tank No. F1740	Tert-butanol	17.58	1.25
E-F1784	Tank No. F1784	DPG Seal Flush	0.10	< 0.01
E-F2340	Tank No. F2340	TBA	14.68	2.05
E-F2351	Hopper No. F2351	PM	0.70	0.01
E-F2835	Tank No. 2835	PG	5.88	1.28
E-F2866	Tank No. 2866	PG	0.16	0.03
E-F3342A	Tank No. F3342A	Catalyst	0.10	0.0004
		PM	0.70	0.02
E-F3342B	Tank No. F3342B	Catalyst	0.10	0.0004
		PM	0.70	0.02
E-FTOTE	Chemical Totes	VOC	0.14	< 0.01

Emission Sources - Maximum Allowable Emission Rates

		H_2SO_4	0.005	< 0.0001
E-FUGMNT	Solvent Degreasing (5)	VOC	0.04	0.12
E-FUGPNT	Surface Coating/ Abrasive Blasting (5)	VOC	4.05	1.39
		PM	3.49	0.29
		PM_{10}	0.91	0.19
E-LAB	Lab Exhaust Vent	VOC	5.20	1.15
E-LR4C	Loading Spot No. LR4C	TPG	0.05	0.002
E-SAMPLE	Sample Points	VOC	3.28	3.01
E-SOAP	Detergent Drums	Detergent	4.77	0.06
E-T5	Loading Spot No. T5	DPG	0.31	0.08
E-T10	Loading Spot No. T10 (7)	MPG	1.30	0.20
E-T12	Loading Spot No. T12	MPG	0.54	0.08
E-T23	Loading Spot No. T23	TPG Bottoms	1.15	0.04
E-T25	Loading Spot No. T25	Spent Caustic	< 0.01	< 0.01
		VOC	0.03	< 0.01
		Acetone	0.01	< 0.01
E-U1801	BPI Cooling Tower (5)	VOC	0.78	3.42
		Acetone	0.08	0.34
		PM_{10}	0.37	1.64
E-U1802	BPII Cooling Tower (5)	VOC	1.38	6.05
		Acetone	0.14	0.60
		PM_{10}	0.66	2.90
E-U1803	BPIII Cooling Tower (5)	VOC	1.08	4.73
		Acetone	0.11	0.47
		PM_{10}	1.30	5.68
E-V3000	Affected Soil Storage Vault	TBA	2.92	1.36

(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_x - total oxides of nitrogen
CO - carbon monoxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented

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
SO_2	-	sulfur dioxide
PG	-	propylene glycols (can include MPG, DPG, and/or TPG)
MPG	-	monopropylene glycol
PGME	-	propylene glycol mono-methyl ether
DPG	-	dipropylene glycol
DPM	-	dipropylene glycol mono-methyl ether
TPG	-	tripropylene glycol
H_2SO_4	-	sulfuric acid

(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) Process emissions from emergency flares (E-B1501A, E-B1501B, and E-B1501C) are permitted for periods in which the continuous flare (E-B1550) is not available to the plant area. The emissions do not reflect incremental potential to emit. The sum of the permitted emissions from these sources shall not exceed the continuous flare (E-B1550) permitted rate when controlling process emissions.
(7) This emission limit is a combination of the emission authorized in this permit and emissions authorized in Permits-by-Rule (PBRs) claimed prior to June 30, 2010 being incorporated be reference. Documentation of compliance with the PBRs shall be maintained on site.
(8) This source was replaced through PBRs claimed prior to October 2007 and is authorized for the emissions noted through the PBRs. Documentation of compliance with the PBRs shall be maintained on site.

Date: January 24, 2020