Emission Sources - Maximum Allowable Emission Rates

Permit Number 20204

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 Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
PL-6A	VA South Holdup Tank	VOC	3.27	0.10
PL-6F	D-Unit CO Trailer Sampling	CO	10.00	0.50
PL-6H	D-Unit Waste Pellet Dumpster	VOC	1.06	4.65
		CO	<0.01	<0.01
		Acetone	0.25	1.10
		Ethylene (6)	0.41	-
		Propane (6)	0.05	-
		Propylene (6)	0.04	-
		VA (6)	0.49	-
		nBA (6)	0.05	-
PL-6R	D Unit Analyzer Vents	VOC	0.12	<0.01
		CO	<0.01	<0.01
		Acetone	0.01	<0.01
PL-7B	550-HP Compressor	NO_x	26.40	-
		CO	3.21	-
		VOC	1.00	-
		SO_2	<0.01	-
		PM	0.40	-
		PM_{10}	0.40	-
		$PM_{2.5}$	0.40	-
PL-7C	800-HP Compressor	NO_x	36.30	-
		CO	4.42	-
		VOC	1.37	-

Emission Sources - Maximum Allowable Emission Rates

	SO_2	0.01	-	
		PM	0.55	-
		PM_{10}	0.55	-
		$PM_{2.5}$	0.55	-
PL-7D	550-HP Compressor	NO_x	24.75	-
		CO	3.01	-
		VOC	0.94	-
		SO_2	<0.01	-
		PM	0.38	-
		PM_{10}	0.38	-
		$PM_{2.5}$	0.38	-
PL-7E	550-HP Compressor	NO_x	24.75	-
		CO	3.01	-
		VOC	0.94	-
		SO_2	<0.01	-
		PM	0.38	-
		PM_{10}	0.38	-
		$PM_{2.5}$	0.38	-
PL-7F	800-HP Compressor	NO_x	36.30	-
		CO	4.42	-
		VOC	1.37	-
		SO_2	0.01	-
		PM	0.55	-

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	0.55	-
		$PM_{2.5}$	0.55	-
PL-7G	800-HP Compressor	NO_x	36.30	-
		CO	4.42	-
		VOC	1.37	-
		SO_2	0.01	-
		PM	0.55	-
		PM_{10}	0.55	-
		$PM_{2.5}$	0.55	-
PL-7H	800-HP Compressor	NO_x	36.30	-
		CO	4.42	-
		VOC	1.37	-
		SO_2	0.01	-
		PM	0.55	-
		PM_{10}	0.55	-
		$PM_{2.5}$	0.55	-
PL-7B, PL-7C, PL-7D, PL-7E, PL-7F, PL-7G, and PL-7H	Combined Compressors	NO_x	-	503.25
		CO	-	61.28
		VOC	-	19.05
		SO_2	-	0.09
		PM	-	7.67
		PM_{10}	-	7.67
		$PM_{2.5}$	-	7.67

Emission Sources - Maximum Allowable Emission Rates

PL-7I	D-Unit CMIR	VOC	0.01	0.19
		CO	<0.01	<0.01
		Acetone	<0.01	0.04
		VA (6)	0.01	-
PL-7J	D-Unit Screen Pack Changes (MSS)	VOC	0.06	0.04
		CO	<0.01	<0.01
		Acetone	0.01	0.01
		Ethylene (6)	0.02	-
		VA (6)	0.06	-
		nBA (6)	0.02	-
PL-7M	D-Unit Wax Drums	VOC	0.04	0.20
		CO	<0.01	<0.01
		Acetone	0.01	0.03
		Ethylene (6)	0.01	-
		VA (6)	0.03	-
		nBA (6)	0.01	-
PL-7N	G-Unit CMIR	VOC	0.01	0.01
PL-7O	G-Unit Screen Pack Changes (MSS)	VOC	0.04	<0.01
PL-7Q	G-Unit Glob Boxes (MSS)	VOC	0.25	0.91
		AA (6)	0.02	-
		Ethylene (6)	0.13	-
		Acetic Acid (6)	0.10	-
		MA (6)	0.19	-
		MAA (6)	0.05	-
		MAME (6)	0.02	-
		MeOH (6)	0.04	-
		Propane (6)	0.04	-
		nBA (6)	0.17	-
		iBA (6)	0.02	-

Emission Sources - Maximum Allowable Emission Rates

		IPA (6)	0.03	-
PL-7R	G-Unit Wax Drums	VOC	0.03	0.11
		Ethylene (6)	0.01	-
		Acetic Acid (6)	0.01	-
		MA (6)	0.01	-
		MAA (6)	0.01	-
		nBA (6)	0.01	-
PL-7S	D-Unit Mineral Spirits Dumpster	VOC	0.06	0.03
PL-7T	G-Unit Mineral Spirits Dumpster	VOC	0.01	0.01
PL-7V	G-Unit Tank Trailer Loading and Unloading (Spot B1087)	VOC	0.42	0.01
PL-7X	G-Unit Tank Trailer Loading and Unloading	VOC	1.54	0.09
PL-7Y	G-Unit Used Oil Dumpster	VOC	0.06	<0.01
PL-8D	G-Unit Acrylic Acid/MAME Tank	VOC	0.57	0.05
PL-8E	CDG Aqueous Collection Tank	VOC	1.44	0.10
PL-8G	D/G Unit Monomer Tank	VOC	0.05	0.68
PL-8J	G-Unit Analyzer Vents	VOC	0.04	<0.01
PL-8L	D/G-Unit RIDs Tank	VOC	0.17	0.01
PL-8M	CDG Organic Decanter Tank	VOC	0.01	0.01
PL-8N	CDG Organic Storage Tank	VOC	1.11	0.01
PL-8Q	Additive Mix Tank	VOC	<0.01	<0.01
PL-8R	Additive Storage Tank	VOC	0.01	0.01
PL-8S	Additive Waste Tank	VOC	<0.01	0.01
PL-8T	G-Unit Waste Solvent Tank	VOC	0.89	0.03
PL-8U	Additive Rain Tank	VOC	<0.01	0.01
PL-8W	G-Unit White Oil Tank	VOC	0.01	0.01
PL-8Z	Beringer Ovens	VOC	0.03	0.15
PL-9J	G Unit Waste Pellet Dumpster	VOC	0.44	1.93
		Ethylene (6)	0.26	-
		Acetic Acid (6)	0.01	-

Emission Sources - Maximum Allowable Emission Rates

		MAA (6)	0.02	-
		MAME (6)	0.01	-
		MeOH (6)	0.05	-
		Propane (6)	0.07	-
		nBA (6)	0.02	-
		IPA (6)	0.02	-
PL-10	Regenerative Thermal Oxidizer (8)	NO_x	1.17	4.71
		CO	37.36	86.13
		VOC	32.42	37.87
		SO_2	0.01	0.04
		PM	0.77	3.16
		PM_{10}	0.77	3.16
		$PM_{2.5}$	0.77	3.16
		Acetone	1.85	2.94
		Ethylene (6)	7.08	-
		VA (6)	11.28	-
		MAA (6)	1.68	-
		iBA (6)	0.48	-
		nBA (6)	3.47	-
		GMA (6)	0.29	-
		MA (6)	3.03	-
		IPA (6)	0.63	-
		AA (6)	0.50	-
		MAME (6)	0.19	-
		Acetic Acid (6)	0.35	-
		MeOH (6)	1.42	-
		OMS (6)	0.06	-
		Propane (6)	0.36	-
		Propylene (6)	0.11	-

Emission Sources - Maximum Allowable Emission Rates

PL-22	CDG Flare	NO_x	30.49	14.34
		CO	220.19	104.02
		VOC	325.17	76.54
		SO_2	0.48	2.12
		Acetone	16.23	5.31
		MAME (6)	0.01	-
		AA (6)	0.13	-
		MAA (6)	0.30	-
		IPA (6)	2.94	-
		MeOH (6)	3.06	-
		nBA (6)	1.84	-
		iBA (6)	0.93	-
		MA (6)	8.14	-
		GMA (6)	1.01	-
		VA (6)	41.59	-
		Acetone (6)	13.53	-
		Ethylene (6)	236.60	-
		Propylene (6)	5.99	-
		Propane (6)	16.18	-
		Cylcopentane (6)	0.05	-
		OMS (6)	0.03	-
PLA-9A	Vinyl Acetate Storage Tank (West) (7)	VOC	0.40	0.43
PLA-9B	Vinyl Acetate Storage Tank (East) (7)	VOC	-	-
PLA-9C	RECVAM Storage Tank (Far East)	VOC	1.00	2.94
PLA-14	D-Unit NBA Storage Tank	VOC	0.02	0.04
PL-F5	D Unit Fugitives (5)	VOC	15.99	70.02
		CO	0.44	1.94
		Acetone	0.03	0.13
PL-F6	G Unit Fugitives (5)	VOC	16.16	70.79

Emission Sources - Maximum Allowable Emission Rates

		Acetone	0.02	<0.01
PL-9K	G-Unit Tank Trailer Loading (Spot 207)	VOC	<0.01	<0.01
PL-96	D-Unit Mineral Spirits Tank	VOC	0.25	<0.01
PL-97	G-Unit Mineral Spirits Tank	VOC	0.25	0.01
EXT-MAINT	Extruder Maintenance	VOC	0.01	0.01
DRY-MAINT	Dryer Maintenance	VOC	2.34	0.06
VAC-LOAD	Vacuum Loading	VOC	0.83	0.01
TANK-DEGAS	Storage Tank Draining/Degassing	VOC	48.67	0.03
LINE-PURGE	Liquid Line Purging	VOC	4.35	1.02
TANK-LAND	Floating Roof Landing	VOC	9.69	0.14
SYSTEM-DEGAS	System Degassing	VOC	0.65	0.12
SLUDGE-LOAD	Sludge Removal	VOC	1.55	0.01
FUG-OELS	Fugitive Component Monitoring	VOC	0.11	0.99

(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
SO_2 - sulfur dioxide
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
AA - acrylic acid
GMA - glycidyl methacrylate
iBA - iso-butyl acrylate
IPA - isopropyl alcohol
MA - methyl acrylate
MAA - methacrylic acid
MAME - maleic acid monoethyl ester
MeOH - methanol
nBA - n-butyl Acrylate
OMS - odorless mineral spirits
VA - vinyl acetate

(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) The speciated emission rate is included in the VOC emission rate. The annual emission rate (TPY) is not limited for individual VOC compounds as they are included in the VOC annual emission rate limit.
(7) All or part of the emissions authorized for emission point number (EPN) PLA-9A may be emitted from EPN PLA-9B, provided that the overall limit for EPN PLA-9A is not exceeded.
(8) Scheduled maintenance for each RTO is limited to 240 hours per year. When one RTO is down, the vent streams shall be routed to the other RTO. The hourly limits specified is the limit when only one RTO is operating. The annual emission rate is the combined emissions from both RTOs.

Date: January 28, 2020