Emission Sources - Maximum Allowable Emission Rates

Permit Number 87923

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.

Before Installation of Vapor Combustor (EPN: VLSVCU):

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
01-F-5H	WW Filter Bin	VOC	0.01	0.01
		Non-VOC (acetone)	0.01	0.01
01-T-12	Raw Material Storage Tank	VOC	0.01	0.01
01-T-15	Raw Material Storage Tank	OI	0.01	0.01
01-T-50	Raw Material Storage Tank	VOC	0.01	0.01
01-T-59	Raw Material Storage Tank	VOC	0.01	0.01
05-F-1AH	Filter Press Collection Bin	VOC	0.01	0.01
		Non-VOC (acetone)	0.01	0.01
05-F-1BH	Filter Press Collection Bin	VOC	0.01	0.01
		Non-VOC (acetone)	0.01	0.01
05-F-2H	Filter Press Collection Bin	VOC	0.01	0.01
		Non-VOC (acetone)	0.01	0.01
05-F-3H	Filter Press Collection Bin	VOC	0.01	0.01
		Non-VOC (acetone)	0.01	0.01
05-F-4H	Filter Press Collection Bin	VOC	0.01	0.01
		Non-VOC (acetone)	0.01	0.01
CAS-1	Fuels Tank 05-T-4C, D, and E	VOC	3.94	0.42
CAS-2	Fuels/Sludge Tank 05-T-4A	VOC	3.94	0.24
CAS-3	Fuels/Sludge Tank 05-T-4B	VOC	3.94	0.24
CAS-4	Fuels Tank 05-T-21	VOC	3.94	0.17
CAS-5	Fuels Tank 05-T-22	VOC	3.94	0.17
S-1	RFO Refining Tanks 05-T-563 and 05-T-567	VOC	2.72	2.28

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05-V-2C	Sludge Bin	VOC	0.01	0.02
		Non-VOC (acetone)	0.01	0.01
TP1	Truck Pad 1	VOC	0.19	0.08
		Non-VOC (acetone)	0.18	0.07
TP2	Truck Pad 2	VOC	3.20	0.14
FUG	Equipment Fugitives (4)	VOC	0.45	1.95
		Non-VOC (acetone)	0.01	0.05
WWS	Wastewater System (5)	VOC	19.56	6.47
		Non-VOC (acetone)	24.69	0.09
		Benzene	0.52	0.78
		Styrene	0.25	0.39
DWS	Deepwell System (6)	VOC	7.88	3.46
		Non-VOC (acetone)	0.09	0.13
		Benzene	0.58	0.44
		Styrene	0.36	0.12

(1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
(2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
OI - Other inorganic compound
(4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
(5) Wastewater System consists of the sources listed in Special Condition No. 36.
(6) The Deepwell System consists of the sources listed in Special Condition No. 40.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

** Compliance with annual emission limits is based on a rolling 12-month period.

Emission Sources - Maximum Allowable Emission Rates

After Installation of Vapor Combustor (EPN: VLSVCU):

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
01-T-12	01-T-12/ Raw Material Storage Tank	VOC	0.01	0.01
01-T-15	01-T-15 / Raw Material Storage Tank	IOC-U	0.01	0.01
01-T-50	01-T-50/ Raw Material Storage Tank	VOC	0.01	0.01
01-T-59	01-T-59 / Raw Material Storage Tank	VOC	0.01	0.01
05-F-1AH	05-F-1AH/ DE Filter Hopper	VOC	0.01	0.01
		Acetone	0.01	0.01
05-F-1BH	05-F-1BH/ DE Filter Hopper	VOC	0.01	0.01
		Acetone	0.01	0.01
05-F-2H	05-F-2H/ Filter Press Collection Bin	VOC	0.01	0.01
		Acetone	0.01	0.01
05-F-3H	05-F-3H/ Filter Press Collection Bin	VOC	0.01	0.01
		Acetone	0.01	0.01
05-F-4H	05-F-4H/ Filter Press Collection Bin	VOC	0.01	0.01
		Acetone	0.01	0.01
S-1	S-1/ 05-T-563	VOC	3.11	-
S-1	S-1/ 05-T-567	VOC	3.11	-
S-1	S-1/ GRPTK3	VOC	-	0.21
TP1	TP1/ Truck Pad 1	VOC	0.06	0.01
		Acetone	0.18	0.08
CAS-9	TP2/ Truck Pad 2	VOC	0.04	<0.01
FUG	FUG/Equipment Fugitives	VOC	0.94	3.26
		Acetone	0.03	0.12
WWS	Wastewater System (6)	VOC	5.21	1.18
		Acetone	2.83	0.01

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		Benzene	0.02	<0.01
		Styrene	0.14	0.05
DB-1	Dewatering Box	VOC	0.03	<0.01
VLSVCU	Vapor Combustor / Tank 05-T-21	VOC	3.46	0.07
VLSVCU	Vapor Combustor / Tank 05-T-22	VOC	3.45	0.07
VLSVCU	Vapor Combustor / Tank 05-T-1B	VOC	5.20	-
VLSVCU	Vapor Combustor / Tank T583	VOC	5.20	-
VLSVCU	Vapor Combustor / Tank T589	VOC	5.20	-
VLSVCU	Vapor Combustor / Tank 05-T-9	VOC	1.21	-
VLSVCU	Vapor Combustor / Tank 05-T-9B	VOC	1.06	-
VLSVCU	Vapor Combustor /Tank 05-T-5	VOC	1.51	-
VLSVCU	Vapor Combustor / Tank 05-T-8	VOC	1.02	-
VLSVCU	Vapor Combustor / CAP1 – T583, T589, T-9A, T-9B, 05-T-5, 05-T-8	VOC	-	1.31
VLSVCU	Vapor Combustor / Tank T574	VOC	10.79	0.01
VLSVCU	Vapor Combustor / Tank T575	VOC	10.79	0.01
VLSVCU	Vapor Combustor / Tank T530	VOC	71.01	-
VLSVCU	Vapor Combustor / Tank T532	VOC	71.01	-
VLSVCU	Vapor Combustor / GRPTK1 – T530, T532	VOC	-	0.59
VLSVCU	Vapor Combustor / Equalization basin EB-1	VOC	71.01	0.47
VLSVCU	Vapor Combustor / Tank T571	VOC	71.01	0.43
VLSVCU	Vapor Combustor / Tank T572	VOC	5.08	<0.01
VLSVCU	Vapor Combustor / Tank T573	VOC	5.08	<0.01
VLSVCU	Vapor Combustor / Tank T584	VOC	14.91	-
VLSVCU	Vapor Combustor / Tank T585	VOC	14.91	-
VLSVCU	Vapor Combustor / Tank T590	VOC	14.91	-
VLSVCU	Vapor Combustor / Tank T591	VOC	14.91	-
VLSVCU	Vapor Combustor / GRPTK2 – T584, T585, T590, T591	VOC	-	1.28
VLSVCU	Vapor Combustor / WWS	VOC	0.16	0.08

Emission Sources - Maximum Allowable Emission Rates

VLSVCU	Vapor Combustor / Tank 05-T-4A	VOC	11.15	-
VLSVCU	Vapor Combustor / Tank 05-T-4B	VOC	11.15	-
VLSVCU	Vapor Combustor / Tank 05-T-4C	VOC	12.22	-
VLSVCU	Vapor Combustor / Tank 05-T-4D	VOC	2.46	-
VLSVCU	Vapor Combustor / Tank 05-T-4E	VOC	2.46	-
VLSVCU	Vapor Combustor / GRPTK5 – 05-T-4A, 4B, 4C, 4D, 4E	VOC	-	0.04
VLSVCU	Vapor Combustor / Tank T51	VOC	1.98	-
VLSVCU	Vapor Combustor / Tank T52	VOC	2.03	-
VLSVCU	Vapor Combustor / Tank T53	VOC	1.71	-
VLSVCU	Vapor Combustor / Tank T54	VOC	1.76	-
VLSVCU	Vapor Combustor / Tank T55	VOC	1.76	-
VLSVCU	Vapor Combustor / GRPTK4 – T51, T52, T53, T54, T55	VOC	-	0.05
VLSVCU	Vapor Combustor	NOx	15.37	4.98
		CO	32.44	5.99
		SO2	0.03	0.02
		PM	0.39	0.31
		PM10	0.39	0.31
		PM2.5	0.39	0.31
		VOC	0.28	0.22

(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
IOC-U - inorganic compounds (unspeciated)
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
(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) Wastewater System consists of the sources listed in Special Condition No. 20.

Emission Sources - Maximum Allowable Emission Rates

Date: July 22, 2020