Emission Sources - Maximum Allowable Emission Rates

Permit Number 1829

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)
U-5A	Initiator Mixing Tank	VOC	2.65	0.30
U-5B	Initiator Mixing Tank	VOC	2.65	0.30
U-6A	Initiator Mixing Tank	VOC	2.16	0.19
U-6B	Initiator Mixing Tank	VOC	2.12	0.23
U-8A	Initiator Mixing Tank	VOC	3.36	0.19
U-8B	Initiator Mixing Tank	VOC	3.36	0.19
U-515	Initiator Mixing Tank	VOC	2.37	0.35
U-19A	Catalyst Pump Mix Chamber	VOC	0.96	0.05
U-19B	Catalyst Pump Mix Chamber	VOC	0.96	0.05
U-19C	Catalyst Pump Mix Chamber	VOC	0.96	0.07
U-19D	Catalyst Pump Mix Chamber	VOC	0.96	0.07
U-19E	Catalyst Pump Mix Chamber	VOC	0.96	0.07
U-19F	Catalyst Pump Mix Chamber	VOC	0.96	0.07
EP-5	Oxidizer Vent Wet Scrubber (8)	VOC	2.33	10.19
		PM	1.91	8.39
		PM_{10}	1.91	8.39

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EP-5 VC	Oxidizer – Vapor Combustor (8)	CO	0.25	1.08
		NO_x	0.29	1.29
		SO_2	<0.01	0.01
		VOC	0.64	2.80
		PM	0.05	0.21
		PM_{10}	0.05	0.21
		$PM_{2.5}$	0.05	0.21
F-EP-9	Piping Fugitives (5)	VOC	19.47	76.21
EP-10	Flare	CO	97.64	2.18
		NO_x	13.52	0.30
		SO_2	0.01	0.01
		VOC	135.00	2.93
	Flare - MSS Emissions	NO_x	7.37	0.19
		CO	53.22	1.40
		VOC	79.29	1.49
EP-22	Priller Scrubber Vent	VOC	0.04	0.17
		PM	0.16	0.72
		PM_{10}	0.16	0.72
		$PM_{2.5}$	0.16	0.72
EP-23	Priller Scrubber Vent	VOC	0.04	0.17
		PM	0.07	0.29
		PM_{10}	0.07	0.29
		$PM_{2.5}$	0.07	0.29

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EP-24	Priller Scrubber Vent	VOC	0.04	0.17
		PM	0.16	0.72
		PM_{10}	0.16	0.72
		$PM_{2.5}$	0.16	0.72
EP-28	Atomizer	PM	4.64	17.88
		PM_{10}	4.64	17.88
EP-35	Binary Distillation T-563 and U-564 Reflux Drum Vent	VOC	0.43	1.12
EP-36	Binary Distillation T-363 and U-364 Reflux Drum Vent	VOC	1.19	1.11
EP-38	Packaging Baghouse	PM	0.14	0.63
		PM_{10}	0.14	0.63
EP-40	Atomizer	PM	4.64	17.88
		PM_{10}	4.64	17.88
EP-41	Water Scrubber	VOC	2.24	0.12
	Water Scrubber MSS Emissions	VOC	4.51	0.01
EP-42	Packaging Baghouse	PM	0.01	0.05
		PM_{10}	0.01	0.05
EP-43	Baghouse (Silos and Airlock Hoppers for U-36 and U-37)	PM	0.03	0.13
		PM_{10}	0.03	0.13
		$PM_{2.5}$	0.03	0.13
EP-44A	Baghouse (Silos and Airlock Hoppers for U-72s, U-12s, U-S1, and U-S2)	PM	0.10	0.43
		PM_{10}	0.10	0.43
		$PM_{2.5}$	0.10	0.43

Emission Sources - Maximum Allowable Emission Rates

EP-44B	Backup Baghouse (Silos and Airlock Hoppers for U-72s, U-12s, U-S1, and U-S2)	PM	0.10	(6)
		PM_{10}	0.10	(6)
		$PM_{2.5}$	0.10	(6)
PRPP	Pilot Plant Reactor R-905	VOC	2.06	9.01
PRPP-1	Pilot Plant Reactor R-960	VOC	2.06	5.12
U-33	Vinyl Acetate Tank	VOC	0.68	0.36
U-201	IPA Recovery Pot	VOC	0.04	0.58
U-653	HEAF Oil Storage Tank	VOC	0.01	0.01
U-914	Catalyst Tank	VOC	<0.01	<0.01
U-967	Catalyst Tank	VOC	<0.01	<0.01
CTWR	Cooling Tower	VOC	0.19	0.83
		PM	0.09	0.39
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
PPRPSOLV	Cold Solvent Degreaser	VOC	5.88	4.94
U3	Isopropyl Alcohol Tank	VOC	0.43	0.10
BLOWDOWNS	Blowdowns	VOC	2.00	0.73
SAMPLING	Sampling	VOC	0.01	0.01
MSS	MSS (7)	VOC	21.01	0.42
		PM	0.02	0.01
		PM_{10}	0.01	0.01

(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
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
$PM_{2.5}$	-particulate matter equal to or less than 2.5 microns in diameter
CO	-carbon monoxide
NO_x	-total oxides of nitrogen
SO_2	-sulfur dioxide

(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) This baghouse is a backup for the main baghouse, EPN EP-44A, and is only used if the main baghouse is off-line due to maintenance or other issues. So, total annual emission rates from this and the main baghouse are shown on the main baghouse (EPN EP-44A).
(7) This EPN covers atmospheric maintenance, startup, and shutdown (MSS) emissions from the MSS activities listed in Attachments A through C of the permit.
(8) Once the Vapor Combustor EPN -5 VC is fully operational the Wet Scrubber EPN-5 shall be removed from service. Waste stream combustion emissions shall not occur from the VC and the Wet Scrubber at the same time.

Date: February 25, 2015