Emission Sources - Maximum Allowable Emission Rates

Permit Number 19074

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 (5)
RTO	Regenerative Thermal Oxidizer Normal Operations	CO	4.45	19.50
		NO_X	0.81	3.55
		SO_2	0.01	0.02
		PM	0.06	0.26
		PM_{10}	0.06	0.26
		$PM_{2.5}$	0.06	0.26
		H_2S	0.01	0.01
		VOC	1.50	6.56
RTO-MSS	Regenerative Thermal Oxidizer Maintenance, Startup, and Shutdown (MSS) Activities (7)	CO	4.45	0.27
		NO_X	0.81	0.05
		SO_2	0.01	0.01
		PM	0.06	0.01
		PM_{10}	0.06	0.01
		$PM_{2.5}$	0.06	0.01
		H_2S	0.01	0.01
		VOC	5.24	0.31
TOX	TOX Normal Operations	CO	10.98	12.14
		NO_x	13.34	14.74
		SO_2	0.01	0.01
		PM	0.50	0.55
		PM_{10}	0.50	0.55
		$PM_{2.5}$	0.50	0.55
		Methyl Acetate	1.01	-
		VOC (4) (8)	2.85	-
		Ethylene	2.85	-

Emission Sources - Maximum Allowable Emission Rates

TOX	TOX - MSS	CO	1.45	0.07
		NO_x	1.76	0.08
		SO_2	0.01	0.01
		PM	0.07	0.01
		PM_{10}	0.07	0.01
		$PM_{2.5}$	0.07	0.01
VS-67	Emergency / Maintenance Flare	CO	2.83	-
		NO_x	0.39	-
		SO_2	< 0.01	-
		VOC	5.55	-
		Methyl Acetate	0.92	-
		Ethylene	2.15	-
FL-2	EVOH Flare	CO	2.83	-
		NO_x	0.39	-
		SO_2	< 0.01	-
		VOC	5.55	-
		Methyl Acetate	0.92	-
		Ethylene	2.15	-
FLR CAP (FL-2/VS-67)	Flare Cap	CO	2.95	1.85
		NO_x	0.41	0.26
		SO_2	0.01	0.04
		VOC	5.55	-
		Methyl Acetate	0.92	-
		Ethylene	2.15	-
TOX FLR CAP (TOX/VS-67/FL-2)	TOX/VS-67/FL-2 CAP	VOC	-	4.39
		Methyl Acetate	-	0.95
		Ethylene	-	1.92
VS-68	Extraction System Vent (Line 2)	VOC	1.95	1.00
VS-68-1	Extraction System Vent (Line 1)	VOC	1.95	1.00
L3-37T-3	#1 Surge Tank (Line 3)	VOC	0.01	0.01
L3-45T-3	#2 Surge Tank (Line 3)	VOC	0.55	0.02

Emission Sources - Maximum Allowable Emission Rates

L3-136P-3	Extraction Column (Line 3)	VOC	0.61	0.03
VS-69	No. 1 Surge Tank Vent (Line 2)	VOC	10.47	0.01
VS-69-1	No. 1 Surge Tank Vent (Line 1)	VOC	10.56	0.01
VS-71	Pre-Fluidized Bed Dryer Vent (Line 2)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		$PM_{2.5}$	< 0.01	< 0.01
		VOC	0.10	0.44
VS-72	Fluidized Bed Dryer Vent (Line 2)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		$PM_{2.5}$	< 0.01	< 0.01
		VOC	0.44	1.91
VS-72-1	Fluidized Bed Dryer Vent (Line 1)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		$PM_{2.5}$	< 0.01	< 0.01
		VOC	0.65	2.83
L3-72-3	Fluidized Bed Dryer Exhaust Air Filter (Fluidized Bed Dryer)	PM	0.03	0.15
		PM_{10}	0.03	0.15
		$PM_{2.5}$	0.03	0.13
		VOC	0.65	2.83
VS-73	Crumb Storage Vent (Line 2)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		$PM_{2.5}$	< 0.01	< 0.01
VS-73-1	Crumb Storage Vent (Line 1)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		$PM_{2.5}$	< 0.01	< 0.01
VS-77	Extraction Water Tank Vent (Line 2)	VOC	< 0.01	< 0.01
VS-77-1	Extraction Water Tank Vent (Line 1)	VOC	< 0.01	< 0.01
VS-78	Centrate Tank Vent (Line 2)	VOC	0.01	0.01
VS-78-1	Centrate Tank Vent (Line 1)	VOC	0.01	0.01
L3-78-3	Centrate Tank Vent (Line 3)	VOC	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

VS-85	Product Storage Hopper Vent	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
L3-85-3	Product Hopper Baghouse Vent (Product Storage Hopper #1/#2/#3)	PM	0.01	0.04
		PM_{10}	0.01	0.04
		$PM_{2.5}$	0.01	0.03
VS-92	Aspirator, Cyclone, and Bagfilter Vent (Line 2)	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
VS-92-1	Aspirator, Cyclone, and Bagfilter Vent (Line 1)	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
L3-92-3	Pellet Cleaner Baghouse Vent (Pellet Cleaner)	PM	0.01	0.04
		PM_{10}	0.01	0.04
		$PM_{2.5}$	0.01	0.03
VS-93	Main Fugitives (6)	Methyl Acetate	0.03	0.11
		VOC (4)	1.76	7.67
		Ethylene	0.53	2.32
L3-93-3	Fugitives (6)	Methyl Acetate	0.05	0.18
		VOC (4)	1.53	4.93
		Ethylene	0.04	0.15
VS-98	No. 1 Chemical Treatment Tank Vent (Line 2)	VOC	0.01	0.01
		IOC	< 0.01	< 0.01
VS-98-1	No. 1 Chemical Treatment Tank Vent (Line 1)	VOC	0.01	0.01
		IOC	< 0.01	< 0.01
VS-99	No. 2 Chemical Treatment Tank Vent (Line 2)	VOC	0.01	0.01
		IOC	< 0.01	< 0.01
VS-99-1	No. 2 Chemical Treatment Tank Vent (Line 1)	VOC	0.01	0.01
		IOC	< 0.01	< 0.01
VS-103	Caustic Silo Filter	PM	0.02	0.10
		PM_{10}	0.02	0.10

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.02	0.10
VS-105	Seal Oil Tank (Line 2)	VOC	0.01	0.01
VS-105-1	Seal Oil Tank (Line 1)	VOC	0.01	0.01
VS-106	+5 Deg C Refrigerator Unit Tank Vent	VOC	0.61	0.01
VS-107	-20 Deg C Refrigerator Unit Tank Vent	VOC	0.19	0.01
VS-112	Central Vacuum System Vent	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
VS-113	Product Hopper Dust Collector Vent	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
VS-114	Product Recovery Vent	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	< 0.01	< 0.01
VS-118	Wastewater Tank Vent	VOC	0.18	0.05
VS-143	Line 2 Filter Cleaning	VOC	1.81	0.05
VS-143-1	Line 1 Filter Cleaning	VOC	1.81	0.05
VS-145	Line 2 Stripper Bottoms Cleaning	VOC	0.85	0.02
VS-145-1	Line 1 Stripper Bottoms Cleaning	VOC	0.85	0.02
VS-150	Additive B Storage Tank	IOC	0.01	0.01
VS-151	Additive C Make-Up Tank	IOC	0.01	0.01
VS-152	Additive G Make-Up Tank	IOC	0.01	0.01
VS-153	Additive B Head Tank (Line 2)	IOC	0.01	0.01
VS-153-1	Additive B Head Tank (Line 1)	IOC	< 0.01	< 0.01
VS-155	Add C Head Tank (Line 2)	IOC	0.01	0.01
VS-157	Additive G Head Tank Vent	IOC	0.01	0.01
VS-190	Water Bath Temporary Storage – Maintenance	VOC	0.13	0.56
VS-191	Strand Forming – Maintenance	VOC	0.96	3.53
VS-204	Sulfuric Acid Storage Tank	IOC	0.01	0.01
VS-259	Diesel Fuel Tank for Maintenance Shop	VOC	0.03	0.01

Emission Sources - Maximum Allowable Emission Rates

VS-260	Diesel Fuel Tank - EMGEN	VOC	0.03	0.01
L3-260	Diesel Fuel Tank – EMGEN2	VOC	0.02	0.01
L3-661-3	#2 Pellet Transfer Baghouse Vent (#2 Pellet Collector Cyclone)	PM	0.01	0.04
		PM_{10}	0.01	0.04
		$PM_{2.5}$	0.01	0.03
FUEL-1	Equipment Diesel Fuel Tank	VOC	0.19	<0.01
COOLTOW	Cooling Tower	PM	0.07	0.29
		PM_{10}	0.07	0.29
		$PM_{2.5}$	0.01	0.01
		VOC (4) (6)	0.12	0.52
		Ethylene	0.12	0.52
COOLTOW2	Line 3 Cooling Water Tower	PM	0.13	0.56
		PM_{10}	0.13	0.56
		$PM_{2.5}$	0.01	0.01
		VOC (4) (6)	0.09	0.39
		Ethylene	0.09	0.39
TOTE3	Dispersant Tote	VOC	0.01	0.01
TOTE4	Polystop Tote	VOC	0.01	0.01
TRUCKLOAD	Truck Liquid Loading	Methyl Acetate	0.03	0.01
		VOC	0.45	0.03
TRUCKLOAD2	MeAc Truck Loading	Methyl Acetate	0.28	0.10
		VOC	0.04	0.02
EMGEN	Emergency Generator	CO	4.73	0.24
		NO_X	20.64	1.03
		SO_2	0.01	< 0.01
		PM	0.60	0.03
		PM_{10}	0.60	0.03
		$PM_{2.5}$	0.60	0.03
		VOC	0.61	0.03
EMGEN2	Emergency Generator 2	CO	4.80	0.24
		NO_X	20.93	1.05

Emission Sources - Maximum Allowable Emission Rates

		SO_2	0.01	0.01
		PM	0.61	0.03
		PM_{10}	0.61	0.03
		$PM_{2.5}$	0.61	0.03
		VOC	0.61	0.03
WELDING	Maintenance Soldering	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	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
IOC - 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
H_2S - hydrogen sulfide
(4) The Ethylene emissions are included in the total VOC emission rates.
(5) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(7) MSS activities for the RTO shall not exceed a total of 120 hours per year.
(8) The authorized VOC emissions have been used in the issuance of Emission Reduction Credits and cannot be increased during the service life of the facility.

Date: January 27, 2021