Emission Sources - Maximum Allowable Emission Rates

Permit Number 103832, N166M1

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)
40-36-1013	Unit 40 Catalyst Activator Heater	VOC	0.05	0.14
		CO	0.82	2.17
		NO_x	0.40	1.05
		$PM_{2.5}$	0.08	0.20
		PM_{10}	0.08	0.20
		PM	0.08	0.20
		SO_2	0.14	0.37
40-36-1013	Unit 40 Catalyst Activator Heater MSS (7)	CO	4.24	--
		NO_x	0.65	--
40-36-1113	Unit 41 Catalyst Activator Heater	VOC	0.05	0.14
		CO	0.82	2.17
		NO_x	0.40	1.05
		$PM_{2.5}$	0.08	0.20
		PM_{10}	0.08	0.20
		PM	0.08	0.20
		SO_2	0.14	0.37
40-36-1113	Unit 41 Catalyst Activator Heater MSS (7)	CO	4.24	--
		NO_x	0.65	--
40-35-1014	Unit 40 HEPA Activator Filter A/B	VOC	2.50	0.30
		SO_2	0.84	0.56
		$PM_{2.5}$	0.09	0.10
		PM_{10}	0.09	0.10
		PM	0.09	0.10
40-35-1114	Unit 41 HEPA Activator Filter A/B	VOC	2.50	0.30
		SO_2	0.84	0.56
		$PM_{2.5}$	0.09	0.10
		PM_{10}	0.09	0.10
		PM	0.09	0.10

Emission Sources - Maximum Allowable Emission Rates

41-35-6105	Unit 41 Additive Bag Discharger Filter	$PM_{2.5}$	0.03	0.10
		PM_{10}	0.03	0.10
		PM	0.03	0.10
40-35-6105	Unit 40 Additive Bag Discharger Filter	$PM_{2.5}$	0.03	0.10
		PM_{10}	0.03	0.10
		PM	0.03	0.10
41-35-61AD	Unit 41 Additive Hopper Filter A, B, C, D	$PM_{2.5}$	0.09	<0.01
		PM_{10}	0.09	<0.01
		PM	0.09	<0.01
40-35-61AF	Unit 40 Additive Hopper Filter A, B, C, D, E, F	$PM_{2.5}$	0.14	0.01
		PM_{10}	0.14	0.01
		PM	0.14	0.01
40-35-6181	Unit 40 Talc Additive Receiver Filter	$PM_{2.5}$	0.12	0.15
		PM_{10}	0.12	0.15
		PM	0.12	0.15
40-35-6191	Unit 40 Slip Additive Receiver Filter	$PM_{2.5}$	0.07	0.11
		PM_{10}	0.07	0.11
		PM	0.07	0.11
40-35-6401	Unit 40 Central Vacuum Secondary Filter	$PM_{2.5}$	0.03	0.03
		PM_{10}	0.03	0.03
		PM	0.03	0.03
40-35-8103	Unit 40 Blower Guard Filter	$PM_{2.5}$	0.06	0.06
		PM_{10}	0.06	0.06
		PM	0.06	0.06
41-35-6401	Unit 41 Central Vacuum Secondary Filter	$PM_{2.5}$	0.03	0.03
		PM_{10}	0.03	0.03
		PM	0.03	0.03
40-35-3102	Unit 40 S-1 Catalyst Charge Purge Filter	$PM_{2.5}$	0.01	0.05
		PM_{10}	0.01	0.05
		PM	0.01	0.05
41-35-3102	Unit 41 PF Catalyst Charge Filter	$PM_{2.5}$	0.01	0.05
		PM_{10}	0.01	0.05
		PM	0.01	0.05

41-35-6201 41-35-6106	Unit 41 Extruder Feed Hopper Vent and Bypass Filters (5)	VOC	0.60	--
		$PM_{2.5}$	0.17	0.34
		PM_{10}	0.17	0.34

Emission Sources - Maximum Allowable Emission Rates

40-35-6201 40-35-6106	Unit 40 Extruder Feed Hopper Vent and Bypass Filters (5)	VOC	3.00	--
		$PM_{2.5}$	0.17	0.34
		PM_{10}	0.17	0.34
		PM	0.17	0.34
41-35-6310	Unit 41 Pellet Surge Hopper Filter (5)	VOC	3.00	--
		$PM_{2.5}$	0.04	0.15
		PM_{10}	0.04	0.15
		PM	0.04	0.15
40-35-6310	Unit 40 Pellet Surge Hopper Filter (5)	VOC	6.00	--
		$PM_{2.5}$	0.04	0.15
		PM_{10}	0.04	0.15
		PM	0.04	0.15
40-35-8120	Unit 40 Talc Additive Silo Vent Filter	$PM_{2.5}$	0.01	0.04
		PM_{10}	0.01	0.04
		PM	0.01	0.04
40-35-8130	Unit 40 Slip Additive Silo Vent Filter	$PM_{2.5}$	0.02	0.06
		PM_{10}	0.02	0.06
		PM	0.02	0.06
41-25-6301	Unit 41 Pellet Dewatering Dryer (5)	VOC	6.00	--
40-25-6300, 40-25-6301	Unit 40 Pellet Dewatering Dryers (5)	VOC	12.00	--
41-35-80LO	Unit 41 Loadout Railcar Filters	$PM_{2.5}$	0.01	0.04
		PM_{10}	0.01	0.04
		PM	0.01	0.04
40-35-80LO	Unit 40 Loadout Railcar Filters	$PM_{2.5}$	0.01	0.04
		PM_{10}	0.01	0.04
		PM	0.01	0.04
41-35-8011, 41-35-8021	Unit 41 Loadout Storage and Off-Spec Silo Filters (5)	VOC	3.00	--
		$PM_{2.5}$	0.15	0.51
		PM_{10}	0.15	0.51
		PM	0.15	0.51

40-35-8011, 40-35-8021	Unit 40 Loadout Storage and Off-Spec Silo Filters (5)	VOC	6.00	--
		$PM_{2.5}$	0.15	0.51
		PM_{10}	0.15	0.51
		PM	0.15	0.51
87-35-3120	SIT Deheeling Dust Filter	$PM_{2.5}$	0.17	0.38
		PM_{10}	0.17	0.38
		PM	0.17	0.38

Emission Sources - Maximum Allowable Emission Rates

MSS-EQUIP	Equipment Opening MSS	VOC	10.96	0.25
MSS-MISC	Miscellaneous MSS	VOC	1.00	1.10
MSS-LOAD	Waste Loading to Trucks	VOC	1.93	0.01
MSS-PM	Filter Replacement and Reactor Leg MSS	$PM_{2.5}$	0.01	<0.01
		PM_{10}	0.06	0.01
		PM	0.13	0.01
42-97-9610	Flare (9)	VOC	252.86	-
		CO	307.74	-
		NO_x	54.04	-
		SO_2	8.19	-
42-97-9620	Vapor Destruction Unit (9)	VOC	5.16	-
		CO	134.91	-
		NO_x	26.48	-
		SO_2	5.51	-
42-97-9610 & 42-97-9620	Flare & Vapor Destruction Unit (9)	VOC	-	25.80
		CO	-	95.31
		NO_x	-	18.70
		SO_2	-	1.58
42-97-9820	Wastewater API Separator	VOC	3.24	0.94
TK-01	Locomotive Engine Tank	VOC	0.49	0.01
42-95-0421	Fresh 1-Hexene Tank	VOC	0.35	0.91
42-95-0422	Fresh 1-Hexene Tank	VOC	0.35	0.89
DG-01	Degreaser 1	VOC	0.03	0.03
DG-02	Degreaser 2	VOC	0.03	0.03
DG-03	Degreaser 3	VOC	0.03	0.03

SAND-01	Rail Repair Sandblasting	$PM_{2.5}$	0.03	<0.01
		PM_{10}	0.03	<0.01
		PM	0.23	0.01
42-05-9201	Cooling Tower	VOC	0.84	1.58
		$PM_{2.5}$	0.87	3.38
		PM_{10}	3.05	10.95
		PM	3.05	10.95
FUG-01	Fugitive Emissions (6)	VOC	4.63	20.29
EMG-ENG 1 Project Number: 265867	Emergency Generator Engine (8)	VOC	0.18	-
		CO	0.52	-
		NO_x	8.07	-
		PM	0.08	

Emission Sources - Maximum Allowable Emission Rates

		PM	0.08	-
		SO_2	0.01	-
EMG-ENG 2	Emergency Generator Engine (8)	VOC	0.18	-
		CO	0.52	-
		NO_x	8.07	-
		$PM_{2.5}$	0.08	-
		PM_{10}	0.08	-
		PM	0.08	-
		SO_2	0.01	-
EMG-ENG 3	Emergency Generator Engine (8)	VOC	0.18	-
		CO	0.52	-
		NO_x	8.07	-
		$PM_{2.5}$	0.08	-
		PM_{10}	0.08	-
		PM	0.08	-
		SO_2	0.01	-
EMG-ENG 1, 2, 3	Emergency Generator Engines (8)	VOC	-	0.02
		CO	-	0.04
		NO_x	-	0.63
		$PM_{2.5}$	-	0.01
		PM_{10}	-	0.01
		PM	-	0.01
		SO_2	-	<0.01
87-97-1510	Fire Water Pump Engine	NO_x	1.00	0.03
		CO	0.40	0.01
		$PM_{2.5}$	0.04	<0.01
		PM_{10}	0.04	<0.01
		PM	0.04	<0.01
		VOC	0.08	<0.01
		SO_2	<0.01	<0.01
EMG-ENGTK1	Emergency Generator Engine Diesel Tank No.1	VOC	<0.01	<0.01
EMG-ENGTK2	Emergency Generator Engine Diesel Tank No.2	VOC	<0.01	<0.01
EMG-ENGTK3	Emergency Generator Engine Diesel Tank No.3	VOC	<0.01	<0.01
FWP-ENGTK	Fire Water Pump Engine Diesel Tank	VOC	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

(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
SO_x - sulfur oxides
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Annual VOC emissions for this source are authorized under the Pellet VOC Cap (EPN PVOC-CAP)
(6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(7) MSS annual emissions included in routine.
(8) 3 emergency engines are authorized and are represented to operate up to 52 hours each per year, with a combined total power output total of 1.5 MW and annual emission cap.
(9) Flare and Vapor Destruction Unit emissions combined on an annual basis.

Date: January 28, 2019