Emission Sources - Maximum Allowable Emission Rates

Permit Number 9803

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)
TDU	Thermal Desorption Unit	VOC	0.09	0.34
		NO_x	0.78	3.09
		SO_2	0.02	0.09
		CO	1.32	5.19
		PM	0.12	0.47
		PM_{10}	0.12	0.47
		$PM_{2.5}$	0.12	0.47
TOU	Thermal Oxidizer on TDU	VOC	0.11	0.25
		NO_x	0.60	1.42
		SO_2	0.13	0.28
		CO	0.37	0.88
		PM	0.07	0.18
		PM_{10}	0.07	0.18
		$PM_{2.5}$	0.07	0.18
SCRUB	Multiple Hearth Furnaces CDS Stack	VOC	0.81	1.85
		NO_x	6.85	15.53
		SO_2	75.05	82.63
		CO	3.13	7.37
		PM (6)	2.13	4.78
		PM_{10} (6)	2.13	4.78
		$PM_{2.5}$ (6)	2.13	4.78
		As_2O_3 (7)	0.06	0.12
		CoO (7)	0.06	0.13
		NiO (7)	0.03	0.07
		MoO_3 (7)	0.24	0.52
		V_2O_5 (7)	0.12	0.26
		PbO (7)	0.01	0.02

Emission Sources - Maximum Allowable Emission Rates

		Al_2O_3 (7)	0.32	0.71
BH-SB1	SB-1 Baghouse	PM (6)	0.11	0.23
		PM_{10} (6)	0.11	0.23
		$PM_{2.5}$ (6)	0.11	0.23
		As_2O_3 (7)	< 0.01	< 0.01
		CoO (7)	< 0.01	< 0.01
		NiO (7)	< 0.01	0.01
		MoO_3 (7)	0.01	0.03
		V_2O_5 (7)	0.02	0.04
		PbO (7)	< 0.01	< 0.01
		Al_2O_3 (7)	0.06	0.13
BH-FPUNLD	Feed Pad Unloading Baghouse	PM (6)	0.31	1.35
		PM_{10} (6)	0.31	1.35
		$PM_{2.5}$ (6)	0.31	1.35
		As_2O_3 (7)	< 0.01	< 0.01
		CoO (7)	< 0.01	0.02
		NiO (7)	0.01	0.06
		MoO_3 (7)	0.04	0.17
		V_2O_5 (7)	0.05	0.21
		PbO (7)	< 0.01	< 0.01
		Al_2O_3 (7)	0.17	0.74
BH-FPDUST	Feed Pad Baghouse	VOC	0.45	0.98
		PM (6)	0.43	1.88
		PM_{10} (6)	0.43	1.88
		$PM_{2.5}$ (6)	0.43	1.88
		As_2O_3 (7)	< 0.01	< 0.01
		CoO (7)	0.01	0.02
		NiO (7)	0.02	0.08
		MoO_3 (7)	0.06	0.24
		V_2O_5 (7)	0.07	0.29
		PbO (7)	< 0.01	< 0.01
		Al_2O_3 (7)	0.23	1.02
BV-FPSILO1	West Catalyst Silo Bin Vent	PM	0.01	0.06
		PM_{10}	0.01	0.06

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.01	0.06
BV-FPSILO2	East Catalyst Silo Bin Vent	PM	0.01	0.06
		PM_{10}	0.01	0.06
		$PM_{2.5}$	0.01	0.06
BV-SODA1	Soda Ash Silo Bin Vent 1	PM	0.02	0.09
		PM_{10}	0.02	0.09
		$PM_{2.5}$	0.02	0.09
BV-SODA2	Soda Ash Silo Bin Vent 2	PM	0.02	0.09
		PM_{10}	0.02	0.09
		$PM_{2.5}$	0.02	0.09
BV-SODA3	Soda Ash Day Bin Vent 1	PM	0.02	0.09
		PM_{10}	0.02	0.09
		$PM_{2.5}$	0.02	0.09
BV-SODA4	Soda Ash Day Bin Vent 2	PM	0.02	0.09
		PM_{10}	0.02	0.09
		$PM_{2.5}$	0.02	0.09
BH-GYPDST1	Gypsum Silo 1	PM	0.14	0.60
		PM_{10}	0.14	0.60
		$PM_{2.5}$	0.14	0.60
BH-GYPDST2	Gypsum Silo 2	PM	0.14	0.60
		PM_{10}	0.14	0.60
		$PM_{2.5}$	0.14	0.60
BH-HYDLIME	Hydrated Lime Silo	PM	0.05	0.21
		PM_{10}	0.05	0.21
		$PM_{2.5}$	0.05	0.21
RAILFILTER	RDS Rail Unloading	VOC	0.41	0.23
OILDRUM	RDS Oil Collection Container	VOC	< 0.01	< 0.01
OILTANK	RDS Oil Collection Tank	VOC	0.04	0.04
OILLOAD	RDS Oil Truck Loading	VOC	0.21	0.03
ROLLOFF	Roll-Off Container Storage	VOC (5)	0.09	0.13
FP-WWTANK	Feed Pad Oil/Water	VOC	< 0.01	< 0.01

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	Collection Tank			
TDU-WWTANK	TDU Process Water Tank	VOC	0.07	0.09
CT-TDU	Cooling Tower for TDU	PM	0.01	0.04
		PM_{10}	< 0.01	< 0.01
		$PM_{2.5}$	< 0.01	0.01
CT-CALCINE	Cooling Tower for Calcine	PM	< 0.01	0.01
		PM_{10}	< 0.01	0.01
		$PM_{2.5}$	< 0.01	0.01
ROADS	Road Emissions	PM (5)	0.02	0.04
		PM_{10} (5)	< 0.01	0.01
		$PM_{2.5}$ (5)	< 0.01	< 0.01
FUG-MSSRST	Planned Maintenance Emissions	PM (5)	0.36	0.04
		PM_{10} (5)	0.36	0.03
		$PM_{2.5}$ (5)	0.36	0.03

(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
NiO - nickel oxide
MoO_3 - molybdenum trioxide
V_2O_5 - vanadium pentoxide
PbO - lead oxide compounds
Al_2O_3 - aluminum oxide
As_2O_3 - arsenic trioxide
CoO - cobalt oxide

(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) Total PM, PM_{10}, and $PM_{2.5}$ are inclusive of the speciated particulate NiO, MoO_3, V_2O_5, PbO, Al_2O_3, As_2O_3, CoO, Na_2SO_4, and $NaHSO_4$.
(7) Emission limit includes all metal species.

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Date: July 16, 2019