Emission Sources - Maximum Allowable Emission Rates

Permit Number 5261

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)
SM1 and SM2 Operations				
SM1 and SM2 FABS				
VX11A and VX11B VX12A and VX12B VX13A and VX13B VX14A and VX14B	RCTO1 Vents RCTO2 Vents RCTO3 Vents RCTO4 Vents	VOC	6.22	25.62
		Exempt Solvent	13.33	58.38
		PM	2.18	8.59
GX101, GX102, GX103, GX104, GX105, GX106, GX107, GX108, GX109, GX110, GX111, GX112, GX113, GX114, GX115, GX116, GX117, GX118, GX119, GX120, GX121, GX122, GX123, GX124, GX125, GX126	General Exhaust	PM_{10}	2.18	8.59
		$PM_{2.5}$	2.18	8.59
		GIC	10.82	46.74
		NO_x	0.05	0.22
		CO	0.40	1.75
AX11, AX12, AX13, AX14, AX15, AX16, AX17, AX18	Acid Scrubbers	NO_x (5)	6.28	27.51
CX11, CX12, CX13, CX14	Caustic Scrubbers	CO (5)	8.12	35.57
MISC1	Labs and Chemical Docks	VOC (5)	0.13	0.49
		PM (5)	0.18	0.68
VX21A and VX21B VX22A and VX22B VX23A and VX23B VX24A and VX24B	RCTO5 Vents RCTO6 Vents RCTO7 Vents RCTO8 Vents	PM_{10} (5)	0.18	0.68
		$PM_{2.5}$ (5)	0.18	0.68
GX201, GX202, GX203, GX204, GX205, GX206, GX207, GX208, GX209, GX210, GX211, GX212, GX213, GX214, GX215, GX216, GX217, GX218 GX219, GX220, GX221, GX222, GX223, GX224, GX225, GX226	General Exhaust	SO_2 (5)	0.01	0.05
		N_2O	20.16	88.31
AX21, AX22, AX23, AX24, AX25, AX26, AX27, AX28	Acid Scrubbers			
CX21, CX22, CX23, CX24	Caustic Scrubbers			
MISC2	Labs and Chemical Docks			

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SM1 and SM2 Planned MSS for RCTOs				
VX11A and VX11B VX12A and VX12B VX13A and VX13B VX14A and VX14B VX21A and VX21B VX22A and VX22B VX23A and VX23B VX24A and VX24B	RCTO1 Vents RCTO2 Vents RCTO3 Vents RCTO4 Vents RCTO5 Vents RCTO6 Vents RCTO7 Vents RCTO8 Vents	VOC (6)(9)	36.00	6.05
		Exempt Solvent (6)(9)	11.50	1.93
SM1 and SM2 Support Equipment				
B11, B12, B13, B14, B15, B16, B17, B18, B19, VGX11, VGX12, VGX13 MISC3 B21, B22, B23, B24, B25, B26, B27, B28, B29 VGX21, VGX22, VGX23 MISC4	SM1 MECH Buildings (Boilers and Industrial Chillers) SM1 Wastewater Treatment Systems, and Cooling Towers SM2 MECH Buildings (Boilers and Industrial Chillers) SM2 Wastewater Treatment Systems, and Cooling Towers	VOC	0.01	0.02
		Exempt Solvent	5.68	20.61
		GIC	0.01	0.01
		PM	2.10	9.20
		PM_{10}	0.54	2.35
		$PM_{2.5}$	<0.01	0.10
		NO_x (5)	13.29	29.88
		CO (5)	7.66	33.46
		VOC (5)	1.00	4.31
		PM (5)	2.66	6.18
		PM_{10} (5)	2.66	6.18
		$PM_{2.5}$ (5)	2.66	6.18
		SO_2 (5)	0.28	0.49
MISC3 and MISC4	Equipment Leak Fugitives	VOC (9)	0.13	0.56
TK11, TK12, TK13, TK14, TK15, TK16, TK107, TK108, TK109, TK110, TK112, TK113 TK21, TK22, TK23, TK24, TK25, TK207, TK208, TK29, TK209, TK212, TK213	SM1Storage Tanks (Process Material, Fuel, and Waste Solvent) SM2 Storage Tanks (Process Material, Fuel, and Waste Solvent)	VOC	0.65	0.01
		GIC	0.48	0.04
SM1 FUG SM2 FUG	SM1 Waste Tank Loading SM2 Waste Tank Loading	VOC	2.45	0.04
Existing Facility Operations (12) (13)				

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WBDG, EB_N, EB_S, 4_02, 4_03, 3_40, 1_19, 1_20, 1_21, 1_71, 1_72		VOC	(11)	49.03
		Exempt VOC	(11)	9.91
		IC	(11)	21.18
		PM	(11)	5.74
		PM_{10}	(11)	5.74
		$PM_{2.5}$	(11)	5.74
		NO_x	(11)	17.00
		CO	(11)	2.83
		SO_2	(11)	0.09
All Emission Points	All Sources at Site	Single HAP	---	<10.00
		Total HAPS	---	<25.00

(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) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
GIC - Gaseous inorganic compounds including acids and bases
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
HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) From products of combustion
(6) Unabated emissions during planned maintenance, gas curtailments, and switching to backup oxidizers based on a maximum of 336 hr/yr for all RCTOs combined
(7) Rate from burning No. 2 fuel oil up to 168 hours per year per boiler
(8) Rate from burning natural gas
(9) Includes planned maintenance, startup and shutdown activities
(10) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Existing Facility
(11) Hourly emission rates are limited by Special Condition No. 4 of the existing facility permit conditions.
(12) Maximum usage rates in Table 1 of the May 2012 permit alteration request limit the perfluorocarbon, hydrofluorocarbon, nitrous oxide, and sulfur hexafluoride emissions for fluorinated gases as defined in (40CFR), Parts 51, 52, 70, and 71.
(13) Maximum fuel usage for all combustion sources authorized in this permit (and including permit by rule claims 30TAC 106.183 and 30TAC 106.511) is limited to 200,000,000 scf of natural gas and 30,000 gallons of No. 2 fuel oil as represented in Table 3 of the May 2012 permit alteration request.

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Date: March 15, 2022