

Emission Sources - Maximum Allowable Emission Rates

Permit Number 20011

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)
10FLR-005	Adiponitrile Flare (6)	VOC	15.80	8.92
		NO _x	10.62	7.68
		CO	72.36	47.94
		NH ₃	1.01	0.57
07TFX-005	No. 1 WAK HUT	VOC	8.94	1.41
07TFX-005A	No. 2 WAK HUT	VOC	21.13	2.50
07TFX-005B	No.3 WAK HUT	VOC	0.38	0.18
07TFX-005C	No.4 WAK HUT	VOC	0.38	0.18
07VNT-008	Filter Jet Vent	NO _x	5.80	25.30
		CO	0.18	0.81
07FLT-013	Crude Filter Vent	NO _x	0.30	1.30
		CO	0.03	0.12
07LTR-016	Op. 11-12 Truck Loading	VOC	0.01	0.01
07LTR-015A	CDD and CDDA/K Truck Loading	VOC	1.40	1.05
07MUDTANK	CAK Decanter Mud Tank	VOC	0.47	2.03
07TFX-023	DCC Decanter	VOC	12.13	2.00
07TFX-024	2nd Stage Decanter	VOC	21.08	4.06
07TFX-025	NVR Residue Tank	VOC	3.40	0.13

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07TFX-026A	DBW Tank A	VOC	0.01	0.01
		NO _x	0.02	0.01
		HNO ₃	0.01	0.01
07TFX-026B	DBW Tank B	VOC	0.01	0.01
		NO _x	0.02	0.01
		HNO ₃	0.01	0.01
07FLT-028	DDDA Rework Filter	PM	3.50	0.30
07VNT-029	Op. 15 Backup Vent (7)	NO _x	0.04	0.20
		CO	0.39	1.69
		SO ₂	0.01	0.04
	Op. 15 Backup Vent during DeColorizer operation (8)	NO _x	129.22	11.63
		CO	9.34	0.84
		SO ₂	0.24	0.02
07TFX-032A	PDT (CDDT) Receiver A	VOC	1.80	0.40
07TFX-032B	PDT (CDDT) Receiver B	VOC	1.80	0.40
07TFX-032C	PDT (CDDT) Receiver C	VOC	1.80	0.40
07TFX-032D	PDT (CDDT) Receiver D	VOC	1.80	0.40
07TFX-032E	PDT (CDDT) Receiver E	VOC	1.80	0.40
07TFX-032F	PDT Shore Tank	VOC	0.42	0.23
07TFX-033A	CDD Receiver A	VOC	2.09	0.47
07TFX-033B	CDD Receiver B	VOC	2.09	0.47
07TFX-034	CDD Storage Tank	VOC	11.06	0.85
07TFX-035	Scaletrol PDC9353 Tank	VOC	0.14	0.01
07TFX-036	OptiSpense CL2000	VOC	0.05	0.01

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	Tank			
07TFX-037A	PAK Receiver A	VOC	4.42	0.23
07TFX-037B	PAK Receiver B	VOC	4.42	0.23
07TFX-037C	PAK Receiver C	VOC	4.42	0.23
07TFX-038A	PAK Storage A	VOC	4.42	0.32
07TFX-038B	PAK Storage B	VOC	4.42	0.26
07TFX-039	RDD HUT Vent Maintenance (8)	VOC	0.22	0.06
07TFX-040	Organic HUT	VOC	34.21	7.17
07TFX-040A	EAW Neutralization Tank	VOC	2.95	0.88
07CWA-041	Cooling Water	VOC	0.84	2.39
07VNT-045	H2 Separator Vent	VOC	0.90	3.94
07TFX-051	Op. 11 Organic Hut	VOC	0.06	0.03
07TFX-053	WFE Jet Tank	VOC	0.01	0.01
07TFX-054	Clean Out Drum	VOC	0.01	0.01
07TFX-054A	Inhibitor Tank	VOC	0.01	0.01
07TFX-057	Op. 14 Aqueous Waste Decanter	VOC	8.84	2.33
07TFX-058	Op. 14 Building Decanter	VOC	0.02	0.01
07TFX-075	Op. 15 Refined Crystallizer Fume Header Maintenance (8)	VOC	0.01	0.01
		NOx	0.23	0.02
		HNO ₃	0.14	0.01
07TFX-630	Op. 15 Flasher Feed Tank Fume Header Maintenance (8)	VOC	0.01	0.01
		HNO ₃	0.09	0.01
07TFX-631	Op. 15 Dilute Nitric Acid Tank Fume Header Maintenance (8)	HNO ₃	0.05	0.01

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07TFX-632	Op. 15 Conc. Nitric Acid Tank Fume Header Maintenance (8)	HNO ₃	0.08	0.01
07TFX-632A	Op. 15 #1 Crude Crystallizer Fume Header Maintenance (8)	VOC	0.01	0.01
		NOx	0.08	0.01
		HNO ₃	0.05	0.01
07TFX-632B	Op. 15 #2 Crude Crystallizer Fume Header Maintenance (8)	VOC	0.01	0.01
		NOx	0.08	0.01
		HNO ₃	0.05	0.01
07TFX-634	Op. 15 NAFM Tank Fume Header Maintenance (8)	VOC	0.01	0.01
		HNO ₃	0.09	0.01
07TFX-697	Op. 16 NML Tank Fume Header Maintenance (8)	VOC	0.01	0.01
		HNO ₃	0.09	0.01
07TFX-698	Op. 16 DBW Extractor Fume Header Maintenance (8)	VOC	0.01	0.01
		HNO ₃	0.02	0.01
07VNT-122	DDDA Flaker Visual Inspections (8)	PM	0.13	0.14
07VNT-123	M1 Flaker Visual Inspections (8)	PM	0.04	0.04
18TFL-027	Class "A" Waste Tank	VOC	0.28	0.65
	Roof Landing & Cleaning (8)	VOC	12.17	0.15
18LTR-027	Class "A" Waste Truck and Frac Tank Loading (8)	VOC	12.30	0.15
18LTR-073	TRI Oil Truck Loading	VOC	0.01	0.01
	WET Tank Truck Loading Class "A" Desludging Waste (8)	VOC	3.94	0.02
18TFX-028	B Aqueous Waste Tank	VOC	0.01	0.01
		HNO ₃	4.32	1.18

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18TFL-030	Class "A" Oil Tank	VOC	0.03	0.04
	Roof Landing & Cleaning (8)	VOC	0.43	0.01
18LTR-030	Class "A" Oil Truck Loading	VOC	0.52	0.09
	Class "A" Oil Truck Loading (8)	VOC	3.94	0.04
18TFX-061	CSM Tank	VOC	0.01	0.01
		HNO ₃	0.72	0.23
		NO _x	0.01	0.01
		HNO ₃	0.01	0.01
18TFX-062	Unloading Tank	VOC	0.01	0.01
		HNO ₃	0.01	0.01
18TFX-062A	RF Separator	VOC	0.01	0.01
		HNO ₃	0.01	0.01
18SMP-63	Settler Sump	VOC	0.01	0.01
18TFL-065	A/B Swing Tank	VOC	0.98	2.30
		HNO ₃	0.09	0.27
	Roof Landing & Cleaning (8)	VOC	0.18	0.01
18TFX-072	Waste Collection Tank	VOC	0.01	0.01
		PM	0.01	0.01
		HNO ₃	0.01	0.01
18TFX-073	Waste Equalization Tank	VOC	0.01	0.01
18SEP-075	A Tank Oil/Water Separator (9)	VOC	0.01	0.01
18TRN-027	Trench from 18TFL027 (8)	VOC	0.13	0.01
18TRN-030	Trench from 18TFL030 (8)	VOC	0.13	0.01
18TRN-065	Trench from 18TFL065	VOC	0.13	0.01

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	(8)			
18SMP-736	Unloading Sump	VOC	0.01	0.02
	Waste Area Tank Cleaning (8)	VOC	0.01	0.01
18SMP-737	Acids Waste Sump	VOC	0.01	0.01
		HNO ₃	0.01	0.01
	Waste Area Tank Cleaning (8)	VOC	0.01	0.01
07SMP-011	Op. 11 Sump	VOC	0.01	0.01
07SMP-011A	Op. 11A Sump	VOC	0.01	0.01
07SMP-012	Op. 12 Sump	VOC	0.01	0.01
07TRN-013	Op. 13 Trenches (8)	H ₃ BO ₃	1.27	0.15
07SMP-013E	Op. 13 East Sump (8)	H ₃ BO ₃	0.58	0.41
07SMP-013W	Op. 13 West Sump (8)	H ₃ BO ₃	0.86	1.13
07SMP-013	Op. 13 Sump	VOC	0.01	0.01
07SMP-014	Op. 14 Sump	VOC	0.01	0.01
07SMP-015	Op. 15 and 16 Sumps	VOC	0.01	0.01
		HNO ₃	0.04	0.01
07SMP-016	Op. 16 Sump	VOC	0.01	0.01
		HNO ₃	0.04	0.01
07FUG	Fugitive Emissions (5)	VOC	7.10	30.98
		CO	0.01	0.01
		NH ₃	0.01	0.04
		HNO ₃	0.08	0.32
		H ₃ BO ₃	0.01	0.01
		TiCl ₄	0.01	0.01
07FUG-1	DBW Solids Transloading	NOx	0.01	0.01
		PM	0.63	0.01
07TFX-636A	Urea Mix Tank	VOC	0.02	0.01
07TFX-636	Urea Solution Tank	VOC	0.03	0.01

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07LTR-025A	NVR Truck Loading	VOC	0.16	0.02
07LTR-026C	DBW Truck Loading and M1 Transloading	VOC	0.01	0.01
		NO _x	0.02	0.01
		HNO ₃	0.01	0.01
		PM	0.66	0.02
07LTR-028A	DDDA Transloading	PM	0.11	0.01
07LTR-028B	M1 Transloading to Drums	PM	0.26	0.01
07LTR-040B	EAW Neut Tank Oil Layer Loading	VOC	1.69	0.03
07RSY-026F	DBW H2 Reactor	NH ₃	0.01	0.01
		CO	0.01	0.01
07DIS-026G	DBW Flash Dryer	NH ₃	0.01	0.01
		CO	0.01	0.01
07DIS-512	No. 1 Flash Dryer Vent	VOC	0.02	0.07
07FUGMSS	C-12 Unit Grouped Maintenance Activities (8)	VOC	3.41	0.07
		NO _x	0.83	0.91
		CO	0.08	0.09
		PM	0.13	0.01
		NH ₃	0.24	0.01
		HNO ₃	1.10	0.79
		H ₃ BO ₃	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
- NO_x - total oxides of nitrogen
- SO₂ - sulfur dioxide
- PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

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- PM₁₀ - 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
- NH₃ - ammonia
- HNO₃ - nitric acid
- H₃BO₃ - boric acid
- TiCl₄ - titanium chloride
- (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) Routine emissions attributable to this facility.
- (7) Pilot emissions only
- (8) Emissions associated with a planned maintenance activity only.
- (9) Emissions include both normal operation and planned maintenance, startup and shutdown emissions.

Date: July 27, 2012