EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 7186 and PSDTX1079

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. 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 * lb/hr	TPY**
10FLR-001 10FLR-002 10FLR-003 10FLR-003A	Converter Flares (6)	CO	0.92	4.01
		NH_3	0.01	0.01
		NO_x	0.11	0.49
		SO_2	0.01	0.02
		VOC	0.20	0.84
10FLR-001 10FLR-002 10FLR-003 10FLR-003A	Converter Flares MSS (7)	CO	332.03	25.42
		NH_3	125.48	8.23
		NO_x	133.27	9.93
		SO_2	0.22	0.04
		VOC	347.34	14.15
10FLR-004	Ammonia Startup Flare	CO	0.19	0.80
		NH_3	0.05	0.20
		NO_x	0.03	0.10
		SO_2	0.01	0.01
		VOC	0.04	0.16
10FLR-004	Ammonia Startup Flare MSS Emissions	CO	116.00	10.58
		NH_3	95.80	8.75
		NO_x	55.66	5.62
		SO_2	0.13	0.02
		VOC	22.54	1.32
10FLR-004A	Ammonia Tank Flare	CO	0.10	0.40
		NO_x	0.02	0.05
		SO_2	0.01	0.01
		VOC	0.02	0.08
10FLR-004A	Ammonia Tank Flare MSS Emissions	CO	8.96	0.36
		NH_3	13.51	0.53

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
		NO_x	7.81	0.32
		SO_2	0.01	0.01
		VOC	0.59	0.03
10FLR-004B	Butadiene Flare	CO	4.68	14.62
		NO_x	2.35	7.33
		SO_2	0.01	0.04
		VOC	2.74	5.81
10FLR-004B	Butadiene Flare MSS Emissions	CO	10.43	0.43
		NH_3	0.01	0.01
		NO_x	5.23	0.22
		SO_2	0.03	0.02
		VOC	10.51	0.34
10FLR-004C	Ammonia Pipeline and Bullet Tank Flare	CO	0.14	0.60
		NO_x	0.02	0.07
		SO_2	0.01	0.01
		VOC	0.03	0.12
10FLR-004C	Ammonia Pipeline and Bullet Tank Flare MSS Emissions	CO	63.00	0.76
		NH_3	6.24	0.08
		NO_x	10.50	0.13
		SO_2	0.07	0.01
		VOC	11.70	0.14
10FLR-005	Adiponitrile Flare	CO	1643.36	2543.21
		NH_3	2.89	8.32
		NO_x	127.89	185.54
		SO_2	0.08	0.12
		VOC	526.47	479.10
10FLR-005	Adiponitrile Flare MSS Emissions	CO	1069.31	81.50
		NH_3	0.01	0.01
		NO_x	231.62	14.00
		SO_2	0.62	0.06

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
		VOC	1042.12	65.17
10FLR-TMP	TEMP Flare (5)	CO	1.98	0.32
		NH_3	0.05	0.01
		NO_x	0.41	0.07
		SO_2	0.01	0.01
		VOC	2.97	0.47
10CLT-040	Cooling Tower	NH_3	3.83	16.75
		PM_{10}	1.10	4.21
		VOC	3.83	16.75
10FUG	ADN Fugitives (4)	CO	0.15	0.45
		H_2S	0.01	0.01
		NH_3	2.44	7.91
		VOC	50.14	182.14
10FUG	ADN Fugitives (4) MSS Emissions	CO	0.01	0.01
		NH_3	0.01	0.01
		VOC	0.04	0.15
10FUG2	311 Fugitives (4)	NH_3	0.02	0.05
		VOC	1.00	4.35
10MSS-001	MSS in ADN Area MSS Emissions	HCl	0.08	0.01
		NH_3	1.76	0.01
		VOC	142.33	1.01
10MSS-002	MSS in 311 Area MSS Emissions	HCl	6.26	0.06
		NH_3	2.20	0.05
		VOC	3.12	0.02
10FLT-063	Nickel Addition Bag Filter	PM_{10}	0.01	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
10FLT-063A	Nickel Powder Vacuum System	PM_{10}	0.05	0.01
10LBA-061B	ADN Barge Loading	VOC	0.04	0.01
10LBA-061D	NH_3 Barge Loading	NH_3	0.69	0.05
10LDR-326A	ADN Drum Loading	VOC	0.01	0.01
10LDR-326B	2M3BN Drum Loading	VOC	0.01	0.01
10LRC-041A	ADN Railcar Loading	VOC	0.01	0.01
10LRC-041B	ADN Load/Unload	VOC	0.01	0.01
10LRC-041C	ADN Railcar Loading	VOC	0.01	0.01
10LRC-041E	MGN Railcar Loading	VOC	0.03	0.01
10LRC-041F	2PN Railcar Degassing	VOC	9.42	0.18
10LTR-036	REF MGN Truck Loading	VOC	0.01	0.01
10LTR-056	No. 3 Tank Farm Truck Spot	VOC	0.86	0.02
10LTR-057	2PN Truck Unloading	VOC	0.04	0.01
10LTR-058A	NSC Truck Loading	VOC	0.01	0.01
10LTR-061	Truck Loading	VOC NH_3	4.99 0.03	1.62 0.01
10LTR-061	Truck Loading MSS Emissions	NH_3 VOC	0.03 4.99	0.01 1.63
10LTR-062	Misc. Load/Unload	VOC	0.10	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
10LTR-072	MDEA Truck Loading/Unloading	VOC	0.03	0.01
10LTR-073	Methanol Brine Truck Loading	VOC	0.32	0.01
10LTR-074	Anti-foulant Unloading	VOC	0.01	0.01
10SCB-154	HCl Scrubber	HCl	0.38	0.05
10TFX-010	Fresh Ligand Tank	VOC	0.01	0.01
10TFX-025A	South WFE Feed Tank	VOC	3.11	0.15
10TFX-025B	North WFE Feed Tank	VOC	3.11	0.15
10TFX-027	REF ADN Tank No. 1	VOC	0.04	0.01
10TFX-028	REF ADN Tank No. 2	VOC	0.04	0.01
10TFX-029	REF ADN Tank No. 3	VOC	0.04	0.01
10TFX-030	REF ADN Tank No. 4	VOC	0.04	0.01
10TFX-031	REF ADN Tank No. 5	VOC	0.04	0.01
10TFX-032	REF ADN Tank No. 6	VOC	0.04	0.01
10TFX-032B	REF ADN Tank No. 7	VOC	0.02	0.02
10TFX-033	North Raffinate Sphere	VOC	17.39	0.70
10TFX-034A	Middle Raffinate Sphere	VOC	17.39	0.70
10TFX-034B	South Raffinate Sphere	VOC	17.39	0.70
10TFX-035A	TG MGN Tank	VOC	1.49	0.56

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
10TFX-036	REF MGN Tank	VOC	0.02	0.02
10TFX-036A	Promoter PN Sphere	VOC	3.45	1.52
10TFX-037	Crude DN/MGN Tank	VOC	0.01	0.01
10TFX-037A	Crude MGN Sphere	VOC	0.14	0.03
10TFX-038	Ethylene Glycol Tank	VOC	0.15	0.01
10TFX-047	Methanol Tank	VOC	8.02	0.15
10TFX-059	Ammonium Salt Tank	NH_3	0.02	0.01
		VOC	0.01	0.01
10TFX-067	Produced Water Tank	NH_3	0.03	0.02
		VOC	0.01	0.01
10TFX-080	Barge Dock REF ADN Tank	VOC	0.06	0.05
10TFX-085	MDEA Amine Tank	VOC	0.01	0.01
10TFX-086	Anti-foulant Tank	VOC	0.50	0.01
10VNT-001	Feed Gas Analyzer Vent	NH_3	0.09	0.36
		VOC	0.01	0.01
10VNT-002	HCN Sample Blower Vent	CO	0.01	0.01
		NH_3	0.19	0.01
		VOC	0.26	0.01
10VNT-255	Pump Tank Scrubber and Closed Sump	CO	0.02	0.07
		VOC	0.13	0.52
10VNT-255	Pump Tank Scrubber and Closed Sump	CO	0.01	0.01
		VOC	66.78	0.86

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
	MSS Emissions			
11TFX-036	HCN/HMD AWST	NH_3	15.79	4.84
		VOC	0.92	0.27
11TFX-047	HCN/HMD HUT	NH_3	13.23	1.63
		VOC	0.68	0.09
11TFX-048	Nitrile HUT	NH_3	13.22	1.23
		VOC	0.68	0.07
11TFX-053	RPF Filtrate Tank No. 1	NH_3	0.70	0.20
		VOC	0.01	0.01
11TFX-054	RPF Filtrate Tank No. 2	NH_3	0.70	0.20
		VOC	0.01	0.01
11TFX-055	311 Area Wastewater Tank	NH_3	0.99	0.26
		VOC	0.04	0.01
11SEP-055A	API Decanter	NH_3	0.99	0.26
		VOC	0.04	0.01
11ODP-055B	Organics Dumpster	VOC	0.01	0.01
11TFX-064	NETZ Filter Feed Tank	NH_3	4.01	2.41
		VOC	0.21	0.13
11TFX-070	NETZ Effluent Tank	NH_3	5.55	2.34
		VOC	0.29	0.12
11TFX-076	Waste Collection Tank	NH_3	0.43	0.28
		VOC	0.02	0.01
11TFX-077	Waste Lift Tank	NH_3	0.04	0.01
		VOC	0.01	0.01
11TFX-153	Precoat Tank No. 1	NH_3	0.47	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
		VOC	0.02	0.01
11TFX-154	Precoat Tank No. 2	NH_3	3.97	0.02
		VOC	0.21	0.01
10RPF-001	Rotary Precoat Filter No. 1	NH_3	2.03	0.91
		VOC	0.44	0.20
10RPF-002	RPF Conveyor/Bagger 1	NH_3	0.01	0.01
		VOC	0.01	0.01
10RPF-003	Rotary Precoat Filter No. 2	NH_3	2.03	0.91
		VOC	0.44	0.20
10RPF-004	RPF Conveyor/Bagger 2	NH_3	0.01	0.01
		VOC	0.01	0.01
Permits by Rule (PBRs) Incorporated by Reference (8)				
10FLR-005	Adiponitrile Flare	CO	0.00	0.03
		NO_x	0.00	0.01
		VOC	0.00	0.05
10FUG	ADN Fugitives (4)	VOC	0.00	0.01
10FUG2	311 Fugitives (4)	VOC	0.00	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) CO - carbon monoxide
HCl - hydrogen chloride
H_2S - hydrogen sulfide
NH_3 - ammonia
NO_x - total oxides of nitrogen
PM_{10} - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.
SO_2 - sulfur dioxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
(4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
(5) This flare is authorized to operate for 336 hours per year and only when Flare 10FLR-005 is shut down for maintenance during an ADN unit turnaround. **(01/08)**
(6) Only one converter can be in startup mode at a time.
(7) Converter startups are limited to 36 total for all converters in a rolling 12-month period. **(01/08)**
(8) Referenced permits by rule are listed for information only. The required controls and monitoring are specified in the registrations (numbers listed with each emissions point) and rules.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

Hrs/year 8,760

** Compliance with annual emission limits is based on a rolling 12-month period. **(09/05)**

Dated: July 5, 2011