EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 4351

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
ANI-FLR373	NO_x Flare Discharge (6) 0.40	(7)	VOC	0.27
		Aniline	0.02	0.09
		Benzene	0.81	2.00
		Nitrobenzene	0.08	0.18
		Cyclohexanone	<0.01	0.02
		NO_x	77.38	168.49
		CO	5.95	8.43
		SO_2	0.60	0.89
		H_2S	<0.01	<0.01
		NH_3	0.01	0.03
ANI-FLR373	NO_x Flare Discharge (6) 1.18	(8)	VOC	0.27
		Aniline	0.02	0.09
		Benzene	0.81	3.47
		Nitrobenzene	0.08	0.34
		Cyclohexanone	<0.01	0.02
		NO_x	89.72	385.64
		CO	5.95	24.29
		SO_2	0.60	2.63
		H_2S	<0.01	<0.01
		NH_3	0.01	0.03
ANI-FLR296	DHN Emergency Flare	Emergency Use Only		
ANI-ABS62	Ammonia Scrubber	Aniline	<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
		Benzene	0.43	1.31
		Nitrobenzene	0.02	0.05
		Phenol	0.01	<0.01
		NH_3	2.40	10.51
ANI-FDHN	DHN Fugitives (4)	Benzene	1.06	4.63
		Nitrobenzene	0.44	1.92
ANI-FANMFG	Aniline Fugitives (4)	Aniline	1.26	5.52
		Benzene	0.19	0.85
		Nitrobenzene	0.55	2.42
		m-phenylenediamine	<0.01	0.02
ANI-TFX261	Nitrobenzene Storage	Nitrobenzene	0.60	0.14
ANI-VNT297	DHN Sump	Benzene	<0.01	<0.01
		Nitrobenzene	<0.01	<0.01
ANI-VNT298	PNP Extractor (5)	Benzene	<0.01	<0.01
		Nitrobenzene	<0.01	<0.01
		Nitric Acid	<0.01	<0.01
ANI-TFX299	PNP Extractor Storage (5)	Nitrobenzene	0.01	<0.01
ANI-FIL190	Filter and Thickener Vent	Aniline	0.50	2.19
ANI-FNOXFL	NO_x Flare Fugitive (4)	Aniline	<0.01	<0.01
		Benzene	0.01	0.06
		Nitrobenzene	<0.01	0.01
		NH_3	<0.01	<0.01
ANI-STR69A	Wastewater Column Vent No. 1	Aniline	<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
		Benzene	<0.01	<0.01
		Nitrobenzene	<0.01	<0.01
ANI-STR69B	Wastewater Column Vent No. 2	Aniline	<0.01	<0.01
		Benzene	<0.01	<0.01
		Nitrobenzene	<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
ANI-TFL75	Benzene Bulk Storage Tank 1.73 Vent	Benzene		0.59
ANI-TFX290	Reactor Nitrobenzene Feed Tank	Benzene	0.01	<0.01
		Nitrobenzene	0.05	<0.01
ANI-TFX282	Purge Column Feed Tank Vent	Aniline	<0.01	0.01
ANI-TFX193	West Aniline Extractor Hold Tank Vent	Aniline	<0.01	<0.01
ANI-TF189E	East Wastewater Tank Vent <0.01	Aniline		<0.01
		Benzene	0.04	0.01
		Nitrobenzene	<0.01	<0.01
ANI-TF2561	Aniline Crude Analysis Tank Vent No. 1	Aniline	0.37	0.22
ANI-TF2562	Aniline Crude Analysis Tank Vent No. 2	Aniline	0.37	0.22
ANI-TFX74	Wastewater Column OVHD Separator	Aniline	<0.01	<0.01
		Benzene	<0.01	<0.01
		Nitrobenzene	<0.01	<0.01
ANI-TFX194	Aniline Extractor Feed Tank Vent	Aniline	<0.01	<0.01
ANI-TFX255	Aniline Rework Storage Tank Vent	Aniline	0.14	0.11
ANI-TFX259	Aniline Safety Tank Vent	Aniline	0.08	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
ANI-TFX260	Crude Aniline Storage Tank Vent	Aniline	0.63	0.19
ANI-TFX283	Coarse Water Feed Tank Vent	Aniline	<0.01	<0.01
ANI-TFX73	East Aniline Extractor Hold Tank Vent	Aniline	<0.01	<0.01
ANI-TFX72	Water Draw-Off Tank Vent	Aniline	<0.01	<0.01
ANI-TFX70	Catalyst Mix Tank Vent	Aniline	0.04	<0.01
ANI-LSH340	Aniline Ship Loading	Aniline	0.58	<0.01
ANI-LTR98	Aniline Truck Loading	Aniline	0.28	0.01
		Benzene	0.37	<0.01
		Nitrobenzene	0.02	<0.01
ANI-LBA96	Aniline Barge Loading	Aniline	1.75	0.33
ANI-LRC195	Rework Railcar Loading	Aniline	0.26	<0.01
ANI-LRC97	Aniline Railcar Loading	Aniline	0.36	0.06
		Nitrobenzene	0.19	0.01
ANI-LTR99	Tar Loading	Aniline	0.04	<0.01
		m-phenylenediamine	<0.01	<0.01
ANI-VNT196	Aniline Building Process Water Sump Vent	Aniline	0.07	0.30
		Benzene	<0.01	<0.01
		Nitrobenzene	<0.01	0.01
		Phenol	<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
ANI-TFX301	Consolidated Effluent Tank Vent	Aniline	<0.01	<0.01
		Benzene	<0.01	<0.01
		Nitrobenzene	<0.01	<0.01
ANI-ADS76E	East Desulfur Drum Vent	H_2S	0.09	0.40
ANI-ADS76W	West Desulfur Drum Vent	H_2S	0.09	0.40
ANI-CT208A	Aniline Cooling Tower South Stack	VOC	0.21	0.91
ANI-CT208B	Aniline Cooling Tower Center Stack	VOC	0.21	0.91
ANI-CT208C	Aniline Cooling Tower North Stack	VOC	0.21	0.91
ANI-CT208D	Aniline Cooling Tower New Stack	VOC	0.24	1.05
ANI-FCOOLT	Aniline Cooling Tower Fugitive	VOC	0.04	0.20
ANI-CTF286	Centrifuge Vent	Benzene	<0.01	0.01
		Nitrobenzene	0.04	0.18
ANI-DCN257	Aniline Product Decanter	Aniline	<0.01	<0.01
ANI-DCN258	Aniline Off-Spec Decanter Vent	Aniline	<0.01	<0.01
ANI-F1304	Aniline T/C Spot 1304 Fugitive (4)	Aniline	0.02	0.10

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
ANI-FANAL	Aniline Analysis Area Fugitive (4)	Aniline	0.13	0.57
ANI-FANBLK	Aniline Bulk Storage Area Fugitive (4)	Aniline	0.12	0.51
ANI-FBARGE	Aniline Barge Loading Fugitive (4)	Aniline	0.01	0.03
		Benzene	0.08	0.36
ANI-FBZBLK	Aniline Benzene Bulk Storage Tank Fugitive (4)	Benzene	0.04	0.18
ANI-FCRDTF	Aniline Crude Tank Farm Fugitive (4)	Aniline	0.19	0.84
		Benzene	0.01	0.06
		Nitrobenzene	0.35	1.53
ANI-FPRCBL	Aniline PRC Battery Limit Fugitive (4)	Aniline	<0.01	0.02
		Benzene	<0.01	0.02
		Nitrobenzene	0.01	0.04
ANI-FRRTUN	Aniline RR/Truck Unload Fugitive (4)	Aniline	0.06	0.26
		Benzene	<0.01	<0.01
		Nitrobenzene	<0.01	0.05
ANI-FSHIP	Aniline Ship Loading Fugitive (4)	Aniline	<0.01	0.02
ANI-FSITE	Aniline OSBL Fugitive (4)	Aniline	0.01	0.06
		Benzene	0.03	0.14
ANI-RFM77	Hydrogen Reformer Exhaust	VOC	0.22	0.96
		NO_x	10.91	47.77
		CO	2.73	11.94

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
		SO_2	0.05	0.20
		PM_{10}	0.39	1.71
ANI-STK169	Ammonia Blowdown Pot Vent	NH_3	0.06	4.79
ANI-STK83	AOP Abater Discharge	VOC	1.84	8.05
		NO_x	44.28	126.47
		SO_2	1.63	7.15
ANI-TFX84	Reactor Catalyst Feed Tank	Aniline	0.02	0.18

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
ANI-TFX85	Thickener Feed Storage Tank	Aniline	0.12	0.01
ANI-TFX90	Alternate Wastewater Diversion Tank	Aniline	<0.01	<0.01
		Benzene	0.03	<0.01
		Nitrobenzene	<0.01	<0.01
ANI-TFX91A	Aniline Bulk Storage Tank - North	Aniline	1.49	0.27
ANI-TFX91B	Aniline Bulk Storage Tank - South	Aniline	1.49	0.27
ANI-TFX92A	Aniline No. 1 Analysis Storage Tank	Aniline	0.73	0.10
ANI-TFX92B	Aniline No. 2 Analysis Storage Tank	Aniline	0.73	0.10
ANI-TFX92C	Aniline No. 3 Analysis Storage Tank	Aniline	0.33	0.05
ANI-XTR288	1st Stage Aniline Extractor Vent	Aniline	<0.01	<0.01
		Nitrobenzene	<0.01	<0.01
ANI-XTR289	2nd Stage Aniline Extractor Vent	Aniline	<0.01	<0.01
		Nitrobenzene	<0.01	<0.01
ANI-TFX192	Tar Tank Vent	Aniline	<0.01	<0.01
		m-phenylenediamine	<0.01	<0.01
ANI-VNT78	Hydrogen Plant Vent Header Discharge	VOC (6)	1.73	1.09
		Aniline	1.41	4.59
		Benzene	0.03	0.09
		NO_x	8.07	9.85

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
		CO	7.04	6.88
ANI-TFX205	Acid Recovery Tank Vent	Benzene	<0.01	<0.01
		Nitrobenzene	<0.01	<0.01
		H_2SO_4	<0.01	<0.01
ANI-VNT264	AOP NO_x Analyzer Vent	NO	<0.01	<0.01
ANI-VT263A	AOP Oxygen Analyzer Vent	NO	<0.01	<0.01
		N_2O	<0.01	<0.01
		NO_x	<0.01	<0.01
ANI-VNT99	Calgon Steamer Organic Tank Vent	Aniline	2.2	<0.01
		Benzene	1.85	<0.01
		Nitrobenzene	2.2	<0.01
ANI-GAUZHS	Gauze Pickling House Vent	HCl	<0.01	<0.01
		Formic Acid	<0.01	<0.01
ANI-LTR95	Nitric Truck Loading	NO_x	0.25	0.01
ANI-TFX101	Strong H_2SO_4 Storage Tank Vent	H_2SO_4	<0.01	<0.01
ANI-VT263B	AOP Methane Analyzer Vent	NO_x	<0.01	<0.01
ANI-STR186	Regeneration Column Vent	Diethanolamine	1.71	7.5
ANI-FANFLR	Aniline Flare Fugitives (4)	Aniline	<0.01	0.02
		Cyclohexanone	<0.01	<0.01
ANI-FLR374	Aniline Flare (6)	VOC	1.01	4.42
		Aniline	0.14	0.60

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
		Benzene	0.06	0.25
		Cyclohexanone	0.01	0.06
		NO_x	4.82	21.12
		CO	18.79	82.32
		SO_2	<0.01	0.02
		NH_3	0.01	0.02
ANI-AN262A	Aniline Reactor Off-Gas Analyzer Vent	Aniline	<0.01	<0.01
		Benzene	<0.01	<0.01
		Cyclohexanone	<0.01	<0.01
		Phenol	<0.01	<0.01
		NH_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 General Rule 101.1
NO_x - total oxides of nitrogen
CO - carbon monoxide
SO_2 - sulfur dioxide
H_2S - hydrogen sulfide
NH_3 - ammonia
PM_{10} - particulate matter less than 10 microns in diameter
H_2SO_4 - hydrogen sulfate
NO - nitrogen oxide
N_2O - nitrous oxide
HCl - hydrogen chloride
(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
(5) Hours of operation are limited to 2,190 hours per year.
(6) The VOC emission estimates do not include emissions of VOC which are specifically identified by chemical name.
(7) Emission limit for the NO_x Flare Discharge (EPN ANI-FLR373) prior

EMISSION SOURCE MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY

to shutdown of the incinerator in Hazardous Waste Permit HW 50166.

(8) Emission limit for the NO_x Flare Discharge (EPN ANI-FLR373) after shutdown of the incinerator in Hazardous Waste Permit HW 50166.

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

_____ Hrs/day ___ Days/week ___ Weeks/year or 8,760 Hrs/year

Dated _____