EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 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, 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)
ANI-ABS62	Ammonia Scrubber (Prior to startup of expansion project) (6)	VOC	0.19	0.03
		NH_3	<0.01	<0.01
ANI-ABS62	Ammonia Scrubber (After startup of expansion project) (7)	VOC	<0.01	<0.01
		NH_3	<0.01	<0.01
ANI-AN262A	Aniline Reactor Off-Gas Analyzer Vent	VOC	<0.01	<0.01
		NH_3	<0.01	<0.01
ANI-CAD192	Tar Tank	VOC	0.04	0.01
ANI-CT208	Aniline Cooling Tower (6)	VOC (5)	0.74	3.24
		PM	0.05	0.20
		PM_{10}	0.04	0.17
		$PM_{2.5}$	<0.01	<0.01
ANI-CT208	Aniline Cooling Tower (7)	VOC (5)	1.04	4.56
		PM	0.07	0.29
		PM_{10}	0.05	0.23
		$PM_{2.5}$	<0.01	<0.01
ANI-DCN257	Aniline Product Decanter	VOC	0.02	<0.01
ANI-DCN258	Aniline Off-Spec Decanter	VOC	0.02	<0.01
ANI-DWTRK	Deepwell Area Truck Loading	VOC	0.03	<0.01
ANI-F1304	Aniline T/C Spot 1304 Fugitive (5)	VOC	<0.01	<0.01
ANI-FANAL	Aniline Analysis Area Fugitive (5)	VOC	<0.01	0.02
ANI-FANBLK	Aniline Bulk Storage Area Fugitive (5)	VOC	<0.01	0.01
ANI-FANFLR	Aniline Flare Fugitives (5)	VOC	<0.01	0.01
ANI-FANMFG	Aniline Fugitives (5)	VOC	0.40	1.74
ANI-FBARGE	Aniline Barge Loading Fugitive (5)	VOC	0.02	0.08
ANI-FBZBLK	Aniline Benzene Bulk Storage Tank Fugitive (5)	Benzene	0.03	0.15
ANI-FCOOLT	Aniline Cooling Tower Piping Fugitive (5)	VOC	<0.01	0.02
ANI-FCRDTF	Aniline Crude Tank Farm Fugitive (5)	VOC	0.03	0.14
ANI-FDHN	DHN Fugitives (5) (8)	VOC	0.57	2.48

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ANI-FIL190	Filter and Thickener Vent (8)	VOC	0.26	1.14
ANI-FFIL190	Filter and Thickener Fugitives (5) (8)	VOC	<0.01	0.04
ANI-FLR296	Nitration Emergency Flare	VOC	0.04	0.16
		NOx	0.04	0.15
		CO	0.07	0.31
		SO_2	<0.01	0.02
ANI-FLR373	Decolorizer Flare (6)	VOC	1.36	0.60
		NOx	118.91	30.73
		CO	5.89	2.69
		SO_2	0.16	0.14
		NH_3	0.03	0.01
ANI-FLR373	Decolorizer Flare (7)	VOC	0.30	0.06
		NOx	22.83	2.22
		CO	5.47	2.46
		SO_2	0.16	0.14
		NH_3	<0.01	<0.01
ANI-FLR374	Aniline Flare (6)	VOC	0.25	0.55
		NOx	4.22	18.49
		CO	20.68	90.58
		SO_2	<0.01	<0.01
		NH_3	0.01	0.06
ANI-FLR374	Aniline Flare (7)	VOC	0.25	0.04
		NOx	4.16	18.22
		CO	20.40	89.34
		SO_2	<0.01	<0.01
		NH_3	0.01	0.06
ANI-FNOXFL	Aniline NOx Flare Fugitive (5)	VOC	<0.01	<0.01
ANI-FPRCBL	Aniline PRC Battery Limit Fugitive (5)	VOC	0.02	0.07
ANI-FREDOX	Redox Unit Fugitive (5)	VOC	0.03	0.13
ANI-FRRTUN	Aniline RR/Truck Unload Fugitives (5)	VOC	<0.01	0.03
ANI-FSITE	Aniline OSBL Fugitives (5)	VOC	0.02	0.09
ANI-FWELL	Deepwell Injection Area Fugitives (5)	VOC	<0.01	<0.01
ANI-FMNB	MNB Fugitive Area (5)(7)	VOC	0.06	0.70
ANI-LBA96	Aniline Barge Loading	VOC	1.79	0.35
ANI-LRC195	Rework Railcar Loading	VOC	0.19	<0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

ANI-LRC97	Railcar Loading	VOC	0.48	0.05
ANI-LTR98	Aniline Product Truck Loading	VOC	1.33	0.04
ANI-LTR99	Aniline Tar Truck Loading	VOC	0.04	<0.01
ANI-ORGTRK	Decant Organic Liquid Truck Loading	VOC	0.32	0.01
ANI-DRMLDG	Drum Loading (6)	VOC	<0.01	<0.01
ANI-DRMLDG	Drum Loading (7)	VOC	0.05	<0.01
ANI-PRGLDG	Purge Tank Truck Loading	VOC	<0.01	<0.01
ANI-RED373	Redox Unit (6)	NOx	3.07	12.22
		CO	2.05	8.15
		VOC	0.15	0.64
		N_2O	0.45	1.97
		PM	0.95	4.18
		PM_{10}	0.95	4.18
		$PM_{2.5}$	0.95	4.18
		SO_2	0.15	0.64
ANI-RED373	Redox Unit (7)	NOx	3.07	12.22
		CO	2.05	8.15
		VOC	0.12	0.53
		N_2O	0.31	1.34
		PM	0.25	1.08
		PM_{10}	0.25	1.08
		$PM_{2.5}$	0.25	1.08
		SO_2	0.15	0.64
ANI-STR69A	Wastewater Column Vent No. 1	VOC	<0.01	<0.01
ANI-STR69B	Wastewater Column Vent No. 2	VOC	<0.01	<0.01
ANI-TF189E	East Wastewater Tank	VOC	0.51	<0.01
ANI-TF203A	South Urea Storage Tank	VOC	0.17	<0.01
ANI-TF2561	Aniline Crude Analysis Tank No. 1 (6)	VOC	0.50	<0.01
ANI-TF2561	Aniline Crude Analysis Tank No. 1 (7)	VOC	0.06	<0.01
ANI-TF2562	Aniline Crude Analysis Tank No. 2 (6)	VOC	0.50	<0.01
ANI-TF2562	Aniline Crude Analysis Tank No. 2 (7)	VOC	0.06	<0.01
ANI-TFL75	Benzene Bulk Storage Tank	VOC	0.78	1.32
ANI-TFX59	Deepwell Injection Tank	NH_3	<0.01	<0.01
		VOC	0.03	<0.01
ANI-TFX61	Primary Surge Tank	NH_3	<0.01	<0.01

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		VOC	0.02	<0.01
ANI-TFX70	Catalyst Mix Tank	VOC	0.21	0.01
		NH_3	<0.01	<0.01
ANI-TFX72	Water Draw-Off Tank	VOC	<0.01	<0.01
		NH_3	<0.01	<0.01
ANI-TFX74	Wastewater Column OVHD Separator	VOC	<0.01	<0.01
		NH_3	<0.01	<0.01
ANI-TFX84	Reactor Catalyst Feed Tank	VOC	0.75	<0.01
		NH_3	<0.01	<0.01
ANI-TFX85	Thickener Feed Storage Tank	VOC	0.64	<0.01
		NH_3	<0.01	<0.01
ANI-TFX90	Alternate Wastewater Diversion Tank	VOC	0.05	<0.01
ANI-TFX91A	Aniline Bulk Storage Tank – North	VOC	0.66	0.31
ANI-TFX91B	Aniline Bulk Storage Tank - South	VOC	0.66	0.31
ANI-TFX92A	Aniline No. 1 Analysis Storage Tank (6)	VOC	0.45	0.57
ANI-TFX92A	Aniline No. 1 Analysis Storage Tank (7)	VOC	0.70	<0.01
ANI-TFX92B	Aniline No. 2 Analysis Storage Tank (6)	VOC	0.45	0.57
ANI-TFX92B	Aniline No. 2 Analysis Storage Tank (7)	VOC	0.53	0.05
ANI-TFX92C	Aniline No. 3 Analysis Storage Tank (6)	VOC	0.45	0.57
ANI-TFX92C	Aniline No. 3 Analysis Storage Tank (7)	VOC	0.53	0.05
ANI-TFX194	No. 3 Topped NB Tank	VOC	0.58	0.04
ANI-TFX255	Aniline Rework Storage Tank	VOC	0.81	0.09
ANI-TFX259	Aniline Safety Tank	VOC	0.45	0.08
		NH_3	<0.01	<0.01
ANI-TFX260	Crude Aniline Storage Tank (6)	VOC	1.65	1.11
ANI-TFX260	Crude Aniline Storage Tank (7)	VOC	0.87	0.05
ANI-TFX261	Nitrobenzene Storage (6)	VOC	0.06	0.04
ANI-TFX261	Nitrobenzene Storage (7)	VOC	<0.01	<0.01
ANI-TFX282	Purge Column Feed Tank	VOC	0.16	0.02
		NH_3	<0.01	<0.01
ANI-TFX283	Coarse Water Feed Tank	VOC	0.02	<0.01
		NH_3	0.03	<0.01
ANI-TFX290	Reactor Nitrobenzene Feed Tank	VOC	0.07	<0.01
		NH_3	0.90	<0.01
ANI-VNT196	Aniline Building Process Water Sump	VOC	<0.01	0.02

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

ANI/DCN284	Crude NB Decanter during Ammonia Scrubber Maintenance	VOC	0.02	0.01
ANI/SMP198	NB Sump during Ammonia Scrubber Maintenance	VOC	<0.01	<0.01
ANI/TFX102	Neutralizer Tank during Ammonia Scrubber Maintenance	VOC	<0.01	<0.01
ANI/TFX200	Decant Organic Tank during Ammonia Scrubber Maintenance	VOC	<0.01	<0.01
ANI/XTR288	1st Stage Extractor during Ammonia Scrubber Maintenance	VOC	<0.01	<0.01
ANI/XTR289	2nd Stage Extractor during Ammonia Scrubber Maintenance	VOC	<0.01	<0.01
ANI/T10401	New Aniline Extractor during Ammonia Scrubber Maintenance	VOC	<0.01	<0.01
MAINTENANCE, START-UP & SHUTDOWN EMISSION RATES (9)				
ANI-DEINVTK	Deinventory Tank (MSS)	VOC	1.13	0.05
ANI-TKMSS	Aniline Tank Maintenance	VOC	<0.01	<0.01
ANI-DHNTKMSS	DHN Tank Maintenance (8)	VOC	1.54	1.51
		Nitric Acid	1.96	<0.01
ANI-PMPMSS	Pump Maintenance	VOC	0.11	0.01
ANI-LINEMSS	Piping Component Maintenance	VOC	0.20	1.69
ANI-VACTRUCK	Vacuum Truck Emissions (Heel and Wastewater Removal)	VOC	1.36	<0.01
ANI-TFL75MSS	Roof Landing Operations	VOC	2.01	0.05

(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
H_2S - hydrogen sulfide
H_2SO_4 - hydrogen sulfate
NH_3 - ammonia
NO - nitrogen oxide
N_2O - nitrous 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) The permit holder is authorized to emit these emission rates until the aniline expansion project is constructed and operational.
(7) The permit holder is authorized to emit these emission rates once the aniline expansion project is constructed and operational.
(8) This EPN will be removed once the aniline expansion project is constructed and operational
(9) From activities specified in Special Condition No. 21 of this permit.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Date: March 21, 2019