

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 1743

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 *	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
ACR-TOU51	Thermal Oxidizer Unit	NO <sub>x</sub>	130.1	499.0
		CO	60.8	267.0
		HCN	<0.01	<0.01
		VOC	7.53	34.82
		ACRN	0.03	1.97
		ACE	0.04	0.15
ACR-VNT51	Absorber Vent	VOC	5,723.0	572.3
		HCN	1.0	0.1
		CO	4,781.0	478.1
		NO <sub>x</sub>	120.0	12.0
ACR-INC60	Incinerator Stack	HCN	4.90	0.21
		ACE	0.56	1.75
		ACRN	0.01	0.04
		VOC	1.03	0.71
		PM	2.50	1.71
		CO	6.24	4.28
		SO <sub>x</sub>	0.11	0.07
		NO <sub>x</sub>	846.07	318.70
ACR-HTR56	Start-up Heater	VOC	0.25	0.03
		PM <sub>10</sub>	0.21	0.02
		CO	2.9	0.31
		SO <sub>x</sub>	0.05	0.01
		NO <sub>x</sub>	11.7	1.2
ACR-FLR57	ISBL Flare	VOC	0.65	2.61
		HCN	1.31	5.74
		SO <sub>x</sub>	4.0	17.52

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>
ACR-FLR58	OSBL Flare	NO <sub>x</sub>	0.11	0.46
		CO	0.02	0.09
		PM <sub>10</sub>	0.01	0.11
		HCN	0.01	0.08
		SO <sub>x</sub>	0.04	0.18
		VOC	0.01	0.04
		NO <sub>x</sub>	0.11	0.55
		CO	0.02	0.12
		PM <sub>10</sub>	0.01	0.01
ACR-ABS59	Crude ACE Tank Scrubber	VOC	<0.01	<0.01
		ACE	<0.01	<0.01
ACR-ABS61	Finished Product Scrubber	VOC	0.05	0.09
ACR-FUG127	HCN Tank Fugitives (4)	HCN	0.14	0.62
ACR-ABS156	ACRN Analysis Tanks Scrubber 0.05		VOC	0.05
ACR-ABS159	Crude/Off-test Tank Scrubber 0.01		VOC	0.08
		HCN	0.01	0.01
ACR-ABS219	HQ & MEHQ Tank Scrubber	VOC	0.02	0.05
ACR-TFX206A	H <sub>2</sub> SO <sub>4</sub> Tank	H <sub>2</sub> SO <sub>4</sub>	<0.01	<0.01
ACR-TFX206B	H <sub>2</sub> SO <sub>4</sub> Tank	H <sub>2</sub> SO <sub>4</sub>	<0.01	<0.01
ACR-TFX216	H <sub>2</sub> O/ACRN Tank	VOC	<0.01	<0.01
ACR-TFX217	Clarifier Tank	VOC	<0.01	0.01
		HCN	<0.01	0.01
ACR-ABS218	ACE Product Tank Scrubber	ACE	0.01	<0.01

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			lb/hr	TPY
ACR-TFX221	Acetic Acid Tank	VOC	0.01	0.04
ACR-TFX222	Ethylene Diamine Tank	VOC	<0.01	0.01
ACR-FLG231	ISBL Fugitives (4)	VOC	1.69	7.39
		HCN	0.27	1.19
ACR-TFX223	ISBL Brine Tank	VOC	<0.01	<0.01
ACR-TFX232	RCRA Filtrate Tank	VOC	0.01	0.04
ACR-TFX280	HCN Brine Tank	VOC	<0.01	<0.01
ACR-ABS311	Dock Scrubber	VOC	0.09	0.39
ACR-FUG321	ACRN Crude/Off Test Fugitives (4) 0.38	VOC		0.09
ACR-FUG322	ACRN Storage Tank Fugitives (4) 0.27	VOC		0.06
ACR-FUG323	ACRN Storage Tank Fugitives (4) 0.27	VOC		0.06
ACR-FUG325	Waste Organic Tank Fugitives (4) 0.3	VOC		0.07
		HCN	<0.01	0.01
ACR-FUG326	Hydroquinone ACRN Tank Fugitives (4)	VOC	0.11	0.47
ACR-FUG327	MEHQ Tank Fugitives (4)	VOC	0.06	0.27
ACR-FUG328	Acetic Acid Tank Fugitives (4) 0.37	VOC		0.09

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Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
ACR-FUG329	ED Tank Fugitives (4)	VOC	0.05	0.21
ACR-FUG330	Brine Tank Fugitives (4)	VOC	0.1	0.44
ACR-FUG331	Recycle H <sub>2</sub> O Tank Fugitives (4) 0.34	VOC		0.08
ACR-FUG334	Clarifier Tank Fugitives (4) <0.01	VOC		<0.01
		HCN	<0.01	0.01
ACR-TFX375	Waste Water Tank	VOC	0.01	0.04
		HCN	0.04	0.15
WWC376-1,2	Settling Chamber	VOC	2.3	10.10
		HCN	0.01	0.04
BIN380	Rx Catalyst Makeup	PM	<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) H<sub>2</sub>SO<sub>4</sub> - sulfuric acid

PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>.

PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.

VOC - volatile organic compounds as defined in General Rule 101.1

NO<sub>x</sub> - total oxides of nitrogen

SO<sub>x</sub> - total oxides of sulfur

CO - carbon monoxide

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Point No. (1)	Name (2)	Name (3)	lb/hr	TPY

HCN - hydrogen cyanide

ACRN - acrylonitrile

ACE - acetonitrile

HQ - hydroquinone

MEHQ - methyl hydroquinone

ED - ethylene diamine

(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

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

Hrs/day 24 Days/week 7 Weeks/year 52 or Hrs/year 8,760

Dated \_\_\_\_\_