EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 9582

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 **
BLR-20	Boiler M-526	CO	6.10	10.30
		NO_x	4.70	20.60
		$PM/PM_{10}/PM_{2.5}$	0.60	2.51
		SO_2	0.05	0.20
		VOC	0.40	1.82
		Acetone	0.14	0.01
HQFIN	Hydroquinone Finishing Area	$PM/PM_{10}/PM_{2.5}$	0.04	0.08
10	Hot Oil Heater	CO	1.51	6.66
		NO_x	0.95	4.16
		$PM/PM_{10}/PM_{2.5}$	0.83	0.19
		SO_2	0.02	0.10
		VOC	0.07	0.28
LR-18	Plant Loading Rack	VOC	1.62	0.11
		Acetone	44.99	3.80
CT-1	M-508 Cooling Tower	VOC	0.03	1.24
M-503A	Emergency Pump Engine	CO	0.95	0.03
		NO_x	4.39	0.11
		$PM/PM_{10}/PM_{2.5}$	0.31	0.01
		SO_2	0.29	0.01
		VOC	0.35	0.01
M-503B	Emergency Pump Engine	CO	0.95	0.03
		NO_x	4.39	0.11
		$PM/PM_{10}/PM_{2.5}$	0.31	0.01
		SO_2	0.29	0.01
		VOC	0.35	0.01
FU-100	100 Unit Fugitives (4)	Benzene	0.19	0.84
		VOC	1.03	4.52
FU-200	200 Unit Fugitives (4)	Acetone	0.01	0.01

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		VOC	0.39	1.70

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY **
FU-300	300 Unit Fugitives (4)	Acetone	0.25	1.09
		VOC	0.75	3.28
FU-400	400 Unit Fugitives (4)	Acetone	0.18	0.80
		Benzene	0.03	0.14
		VOC	0.20	0.88
FU-700	700 Unit Fugitives (4)	VOC	0.09	0.41
FU-WW	Wastewater Fugitives (4)	Acetone	0.03	0.15
		VOC	0.16	0.68
V-405A/B	PARA Storage Tanks (V405A, V405B)	Total VOC Cap	0.01	0.06
V-HQ	HQ Finishing (V332, V333, and V334)	Total VOC Cap	0.01	0.01
		Total Acetone Cap	0.02	0.01
E-331	M-339 After Condenser Jet	VOC	0.05	0.20
V-Diesel	Diesel Storage Vessels (V52, V53, V62, and V63)	Total VOC Cap	0.14	0.01
V-715	Diphenylamine Storage Tank	VOC	0.13	0.01
V-LAB	Laboratory Vents (V-54/V-55/V-56/V-57)	Total VOC Cap	0.24	0.05
V-9 ONLY	C-202 Scrubber Exhaust	VOC	EMERGENCY USE	
V-415	Sodium Sulfite Tank	Sodium Sulfite	0.02	0.01
V-413	Peroxide Storage Tank	Hydrogen Peroxide	0.25	0.01
V-Caustic	Caustic Tank (V-212, V-412)	Sodium Hydroxide	0.42	0.01
V-321	Sodium Bisulfite Tank	Sodium Bisulfite	0.05	0.07
V-Sulfuric	Sulfuric Acid Tanks (V-1408, V-303)	Total Sulfuric Acid Cap	0.01	0.01

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		AIR CONTAMINANTS DATA		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY **
FLR-1	Flare 1 (Normal Operations)	VOC	3.18	1.55
		Acetone	4.88	0.05
		CO	7.03	16.66
		NO_x	0.82	1.94
		SO_2	0.10	0.42
MAINTENANCE, STARTUP, AND SHUTDOWN (MSS) EMISSIONS				
MSS-CAP	Total Uncontrolled Cap	VOC	20.42	0.57
BLR-20	Boiler M-526 (MSS Activities)	VOC	0.01	0.01
FLR-1	Flare 1 (MSS Activities)	VOC	2.84	0.67
		Acetone	0.53	0.13
		CO	5.48	1.31
		NO_x	0.64	0.15
		SO_2	0.10	0.02

(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
NO_x - total oxides of nitrogen
$PM/PM_{2.5}/PM_{10}$ - particulate matter, PM equal to or less than 2.5 microns in diameter, and PM equal to or less than 10 microns in diameter; respectively. 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 compound 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.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:
8,760 Hrs/year.

** Compliance with annual emission limits is based on a rolling 12 month period.

Dated: May 31, 2011