

# EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

Flexible Permit Number 6618

This table lists the maximum allowable emission caps or 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 Rates *	Source	Air Contaminant	<u>Emission</u>
Point No. (1)	Name (2)	Name (3)	lb/hr
TPY**			
Q4501	Plant Flare	NO <sub>x</sub> , CO, SO <sub>2</sub>	
Q4502	Thermal Oxidizer	NO <sub>x</sub> , CO, SO <sub>2</sub>	
F-1, FUG-DF, F-CDNZ	Dryer F	NO <sub>x</sub> , CO, SO <sub>2</sub>	
G-1, FUG-DG, G-CDNZ	Dryer G	NO <sub>x</sub> , CO, SO <sub>2</sub>	
J1, J2, J3, J4, J5, J6, J7, J8, J9, FUG-DJ	Dryer J	NO <sub>x</sub> , CO, SO <sub>2</sub>	
K1, K2, K3, K4, K5, K6, K7, K8, K9, FUG-DK	Dryer K	NO <sub>x</sub> , CO, SO <sub>2</sub>	
L1, L2, L3, L4, L5, L6, L7, L8, L9, FUG-DL	Dryer L	NO <sub>x</sub> , CO, SO <sub>2</sub>	
M1, M2, M3, M4, M5, M6, M7, M8, M9, FUG-DM	Dryer M	NO <sub>x</sub> , CO, SO <sub>2</sub>	
P1, P2, P3, P4, P5, P6, P7, P8, P9, FUG-DP	Dryer P	NO <sub>x</sub> , CO, SO <sub>2</sub>	
Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, FUG-DQ	Dryer Q	NO <sub>x</sub> , CO, SO <sub>2</sub>	
Emission Caps:		NO <sub>x</sub>	16.90
		CO	6.80
		SO <sub>2</sub>	1.60
			61.20
			15.40
			7.10

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AIR CONTAMINANTS DATA			
Emission Rates *	Source	Air Contaminant	Emission
Point No. (1)	Name (2)	Name (3)	lb/hr
TPY**			
	Planned MSS Emissions (6):	NO <sub>x</sub>	0.50
		CO	2.54
		SO <sub>2</sub>	0.01
Q4502	Thermal Oxidizer	PM	
F-1, F-7, FUG-DF, F-2A, F-2B, F-CDNZ	Dryer F	PM	
G-1, G-7, FUG-DG, G-2A, G-2B, G-CDNZ	Dryer G	PM	
J1, J2, J3, J4, J5, J6, J7, J8, J9, FUG-DJ	Dryer J	PM	
K1, K2, K3, K4, K5, K6, K7, K8, K9, FUG-DK	Dryer K	PM	
L1, L2, L3, L4, L5, L6, L7, L8, L9, FUG-DL	Dryer L	PM	
M1, M2, M3, M4, M5, M6, M7, M8, M9, FUG-DM	Dryer M	PM	
P1, P2, P3, P4, P5, P6, P7, P8, P9, FUG-DP	Dryer P	PM	
Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, FUG-DQ	Dryer Q	PM	
A5AF, FUG-ABRS, FUG-A5F, FUG-CU	Miscellaneous Sources	PM	
	Emission Cap	PM	14.70
	Planned MSS Emissions (6):	PM	0.13
			0.01
F2000A	Storage Tank F2000A	NH <sub>3</sub>	

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Emission Rates *	Source	Air Contaminant	<u>Emission</u>
Point No. (1)	Name (2)	Name (3)	lb/hr
TPY**			
FUG E-849	Ammonia Chiller	NH <sub>3</sub>	
NH3FUGP2	P2 NH <sub>3</sub> Fugitives (4)	NH <sub>3</sub>	
NH3FUGP3	P3 NH <sub>3</sub> Fugitives (4)	NH <sub>3</sub>	
NH3FUGP5	P5 NH <sub>3</sub> Fugitives (4)	NH <sub>3</sub>	
RCTFUGC2	C-2 Polymer Area	NH <sub>3</sub>	
RCTFUGC3	C-3 Polymer Area	NH <sub>3</sub>	
T-5001, T-5002 T-5003, T5004	Cooling Towers	NH <sub>3</sub>	
	Emission Cap	NH <sub>3</sub>	39.5
F-1, F-7, FUG-DF, F-CDNZ, F-TRIAL	Dryer F	VOC	
G-1, G-7, FUG-DG, G-CDNZ	Dryer G	VOC	
J1, J2, J3, J4, J5, J6, J7, J8, J9, FUG-DJ	Dryer J	VOC	
K1, K2, K3, K4, K5, K6, K7, K8, K9, FUG-DK	Dryer K	VOC	
L1, L2, L3, L4, L5, L6, L7, L8, L9, FUG-DL	Dryer L	VOC	
M1, M2, M3, M4, M5, M6, M7, M8, M9, FUG-DM	Dryer M	VOC	
P1, P2, P3, P4, P5, P6, P7, P8,	Dryer P	VOC	

P9, FUG-DP

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Emission Rates *	Source	Air Contaminant	<u>Emission</u>
Point No. (1)	Name (2)	Name (3)	lb/hr
TPY**			
Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, FUG-DQ	Dryer Q	VOC	
LC-VF	Latex COAG Line F	VOC	
FUG-LCG	Latex COAG Line G	VOC	
FUG-LCJ	C and D - A3, J Dryer	VOC	
FUG-LCK	C and D - A3, K Dryer	VOC	
FUG-LCL	C and D - A3, L Dryer	VOC	
FUG-LCM	C and D - A3, M Dryer	VOC	
FUG-LCP	C and D - A6, P Dryer	VOC	
FUG-LCQ	C and D - A6, Q Dryer	VOC	
FUG-A2F	Packing and Shipping	VOC	
FUG-A3F	Packing and Shipping	VOC	
FUG-A6F	Packing and Shipping	VOC	
LTX-17	Seal Drum	VOC	
NLTXLDG	D8 Latex Loading	VOC	
ELTXULDG	Unloading	VOC	
Q4501	Plant Flare	VOC	
Q4502	Thermal Oxidizer	VOC	
FUG-B1A, FUG-B2, FUG-B3, RCTFUGC1A, RCTSAMPFUG,	VOC Fugitives (4)	VOC	

RCTFUGC2,  
RCTFUGC3, FUGJ1,  
FUGJ2, BIO-F, UNLDSM

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AIR CONTAMINANTS DATA			
Emission Rates *	Source	Air Contaminant	<u>Emission</u>
Point No. (1)	Name (2)	Name (3)	lb/hr
TPY**			
CLEAN-B1A, CLEAN-B2, CLEAN-B3, CLEAN-C1, CLEAN-C2, CLEAN-C3, CLEAN-D8, CLEAN-J1, CLEAN-J2	Vessel Cleaning	VOC	
F401T	Latex Storage	VOC	
F402T	Latex Storage	VOC	
F403T	Latex Storage	VOC	
F410N	Latex Storage	VOC	
F420N	Latex Storage	VOC	
F430N	Latex Storage	VOC	
F440N	Latex Storage	VOC	
F450N	Latex Storage	VOC	
F400N	Tanks	VOC	
F401N	Tanks	VOC	
F600A	Latex Storage	VOC	
F600B	Latex Storage	VOC	
F600C	Latex Storage	VOC	
F600D	Latex Storage	VOC	
F600E	Latex Storage	VOC	

F600F	Latex Storage	VOC
F600G	Latex Storage	VOC
F600H	Latex Storage	VOC

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Emission Rates *	Source	Air Contaminant	<u>Emission</u>
Point No. (1)	Name (2)	Name (3)	lb/hr
TPY**			
F600J	Latex Storage	VOC	
F600K	Latex Storage	VOC	
F600L	Latex Storage	VOC	
F600M	Latex Storage	VOC	
F600P	Latex Storage	VOC	
F600T	Latex Storage	VOC	
F600U	Latex Storage	VOC	
F600W	Latex Storage	VOC	
F600Q	Latex Storage	VOC	
F600R	Latex Storage	VOC	
F600X	Latex Storage	VOC	
F600V1	Latex Storage	VOC	
F600V2	Latex Storage	VOC	
F601	Latex Storage	VOC	
F601S	Latex Storage	VOC	
F602	Latex Blend Tank	VOC	
F602S	Latex Storage	VOC	
F603	Latex Blend Tank	VOC	

F603S	Latex Storage	VOC
F604	Latex Blend Tank	VOC
F604S	Latex Storage	VOC
F605	Latex Blend Tank	VOC

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Emission Rates *	Source	Air Contaminant	<u>Emission</u>
Point No. (1)	Name (2)	Name (3)	lb/hr
TPY**			
F606	Latex Blend Tank	VOC	
F607	Latex Blend Tank	VOC	
F608	Latex Blend Tank	VOC	
F609	Latex Blend Tank	VOC	
F6010	Latex Blend Tank	VOC	
F6011	Latex Blend Tank	VOC	
F6012	Latex Blend Tank	VOC	
F801A	Primary Feed Latex A	VOC	
F801B	Utility Latex Tank	VOC	
F812	Conc. Latex Product	VOC	
F816	pH Adjustment	VOC	
F817	pH Adjustment	VOC	
F850A	Special Feed Latex	VOC	
F850B	Special Feed Latex	VOC	
F825A	Latex Interstage Surge	VOC	
F825B	Latex Interstage Surge	VOC	

F825C	Latex Interstage Surge	VOC
F825D	Latex Interstage Surge	VOC
F852A	Conc. Latex Product	VOC
F852B	Conc. Latex Product	VOC
F852C	Conc. Latex Product	VOC

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Emission Rates *	Source	Air Contaminant	<u>Emission</u>
Point No. (1)	Name (2)	Name (3)	lb/hr
TPY**			
F852D	Conc. Latex Product	VOC	
F852E	Conc. Latex Product	VOC	
F852F	Conc. Latex Product	VOC	
F851	Conc. Latex Tank	VOC	
F855A	Conc. Latex Product	VOC	
F855B	Conc. Latex Product	VOC	
F855C	Conc. Latex Product	VOC	
F855D	Conc. Latex Product	VOC	
F870	Conc. Latex Product	VOC	
F871	Conc. Latex Product	VOC	
FUGFUEL	Plant Fuel Transfers	VOC	
Insignificant Source List	285 Vessels	VOC	
F119 (mercaptan)	Raw Material Storage	VOC	
F122 (mercaptan)	Tanks		
F131 (styrene)			
F132 (styrene)			



F133 (styrene)  
 F134 (styrene)  
 F243 (pinane hydroperoxide)

F360KA, F364C, F364D, F364E, F364F, F410E, F410F, F824A, A4ADDSYFUG, A2ADDSYFUG, and A6ADDSYFUG	Change, Feed, or Makeup Tanks	VOC
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Emission Rates *	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	
TPY**				
T-5001, T-5002 T-5003, and T-5004	Cooling Towers (4)	VOC		
L1A, L2A, L3A, L4A, L1B, and L2B L3B, L4B, FLOCBSN, LNDFILL, BIOLGN	Wastewater Treatment	VOC		
H2LBV, H4LBV, A1LAB1, A1LAB2, A1LAB3, A1LAB4, A1LAB5, A1LAB6, A1LAB7, LBS	Laboratory Vents	VOC		
G-DEGR, SP1-DEGR SP2-DEGR, N1-DEGR, REF-DEGR, P-DEGR, D8-DEGR, W5-DEGR, X2-DEGR, H-DEGR	Degreasers	VOC		
SUMP-A1, SUMP-A2, SUMP-A3, SUMP-A6, SUMP-B1, SUMP-B2, SUMP-B3, SUMP-D8, SUMP-D3	Water Separator	VOC		
	Emission Caps:	VOC (5)	684.600	432.80
		Butadiene	11.00	17.10
		Butenes	3.52	1.30

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Emission		Source		
		Air Contaminant		
Emission Rates *	Point No. (1)	Name (2)	Name (3)	
lb/hr	TPY **			
		Styrene	202.30	218.40
		CS <sub>2</sub>	5.50	23.90
	Planned MSS Emissions (6):	VOC (5)	11.86	4.05
		Butadiene	6.05	0.67
		Butenes	1.82	0.10
		Styrene	1.05	0.55

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Emission Rates *	Source	Air Contaminant		<u>Emission</u>
Point No. (1)	Name (2)	Name (3)	lb/hr	
TPY**				
LC-VF, FUG-LCG, FUG-LCJ, FUG-LCK, FUG-LCL, FUG-LCM, FUG-LCP, FUG-LCQ	Crumb Rubber Finishing	H <sub>2</sub> SO <sub>4</sub>	0.01	0.05
T-5111, T-5112, T5113	Chlorine Fugitives (4)	Cl <sub>2</sub>	0.03	0.03

MSS EMISSIONS VENTED TO ATMOSPHERE

SUMP-A1, SUMP-A2	Planned MSS Emissions (6)	VOC (5)	1.05	0.01
SUMP-A3, SUMP-A6,		Butadiene	0.01	0.01
SUMP-B1, SUMP-B2,		Styrene	1.00	0.05
SUMP-B3, SUMP-D3		NO <sub>x</sub>	0.01	0.01
SUMP-D8, FUG-DW,		CO	0.16	0.01
FUG-DF, FUG-DG,		PM	0.13	0.01
FUG-DJ, FUG-DK,				
FUG-DL, FUG-DM,				

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Emission Rates *		Point No. (1)	Name (2)	Air Contaminant	
lb/hr	TPY **			Name (3)	
FUG-DP, FUG-DQ					
6618-MSS/MISC		Miscellaneous MSS Emissions (6)	VOC (5)	2.73	2.78
			Butadiene	0.02	0.02
			Butenes	0.01	0.01
			Styrene	0.04	0.05
			NO <sub>x</sub>	0.01	0.01
			CO	0.01	0.01
6618-MSS/DEGAS		Uncontrolled MSS Degassing Emissions (7)	VOC (5)	2.89	0.24
			Butadiene	0.46	0.04
			Butenes	0.14	0.01
			Styrene	2.29	0.19

- (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)
  - NO<sub>x</sub> - total oxides of nitrogen
  - CO - carbon monoxide
  - SO<sub>2</sub> - sulfur dioxide
  - 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 PM greater than 10 microns is emitted.
  - NH<sub>3</sub> - ammonia
  - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
  - CS<sub>2</sub> - carbon disulfide
  - H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
  - Cl<sub>2</sub> - chlorine
- (4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
- (5) VOC emissions include butadiene, butenes, styrene, and other organic compounds.
- (6) MSS Emissions are included in the Emission Caps.
- (7) Planned MSS Degassing Emissions venting to atmosphere after VOC concentration has been

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AIR CONTAMINANTS DATA

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

monitored and measured as equal to or less than 10,000 ppmv as specified in Special Condition No. 13.

\* Emission rates are based on a continuous operating schedule: 8,760 hours/year.

\*\* Compliance with annual emission caps and annual individual emission limitations is based on a rolling 12-month period.

Dated January 20, 2009