

# ATTACHMENT A.1

Permit Number 2193

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES SHORT-TERM

This table lists the maximum allowable emission rates (short-term) 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)	<u>Emission Rates</u> lb/hr
3-9	ST 3-9	VOC	80.09
3-10	ST 3-10	VOC	0.01
5-21	ST 5-21	VOC	1.57
7	ST 7	VOC	200.21
10-9	ST 10-9	VOC	120.13
10-10	ST 10-10	VOC	120.13
10-11	ST 10-11	VOC	120.13
10-12	ST 10-12	VOC	120.13
10-13	ST 10-13	VOC	120.13
10-14	ST 10-14	VOC	120.13
10-15	ST 10-15	VOC	120.13
10-16	ST 10-16	VOC	120.13
10-17	ST 10-17	VOC	120.13

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES SHORT-TERM

AIR CONTAMINANTS DATA			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u> lb/hr
10-18	ST 10-18	VOC	120.13
10-19	ST 10-19	VOC	120.13
10-20	ST 10-20	VOC	120.13
10-21	ST 10-21	VOC	0.30
12-1	ST 12-1	VOC	140.15
12-3	ST 12-3	VOC	140.15
12-4	ST 12-4	VOC	140.15
12-5	ST 12-5	VOC	140.15
12-6	ST 12-6	VOC	140.15
12-7	ST 12-7	VOC	140.15
12-8	ST 12-8	VOC	140.15
12-9	ST 12-9	VOC	140.15
12-10	ST 12-10	VOC	140.15
12-11	ST 12-11	VOC	140.15
12-12	ST 12-12	VOC	140.15
12-13	ST 12-13	VOC	140.15
12-14	ST 12-14	VOC	140.15
12-15	ST 12-15	VOC	140.15
12-16	ST 12-16	VOC	140.15

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES SHORT-TERM

AIR CONTAMINANTS DATA			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u> lb/hr
12-17	ST 12-17	VOC	140.15
12-18	ST 12-18	VOC	140.15
12-19	ST 12-19	VOC	140.15
12-20	ST 12-20	VOC	140.15
12-21	ST 12-21	VOC	140.15
12-22	ST 12-22	VOC	140.15
12-23	ST 12-23	VOC	140.15
12-24	ST 12-24	VOC	140.15
12-25	ST 12-25	VOC	140.15
12-26	ST 12-26	VOC	140.15
12-27	ST 12-27	VOC	140.15
12-28	ST 12-28	VOC	140.15
12-29	ST 12-29	VOC	140.15
12-30	ST 12-30	VOC	140.15
15-1	ST 15-1	VOC	160.17

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES SHORT-TERM

AIR CONTAMINANTS DATA			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u> lb/hr
15-2	ST 15-2	VOC	0.70
15-3	ST 15-3	VOC	1.98
20-1	ST 20-1	VOC	1.57
20-2	ST 20-2	VOC	1.22
22	ST 22	VOC	140.15
25-1	ST 25-1	VOC	140.15
25-2	ST 25-2	VOC	140.15
25-3	ST 25-3	VOC	140.15
25-4	ST 25-4	VOC	140.15
25-5	ST 25-5	VOC	140.15
25-6	ST 25-6	VOC	140.15
25-7	ST 25-7	VOC	140.15
25-8	ST 25-8	VOC	140.15
25-9	ST 25-9	VOC	140.15
25-10	ST 25-10	VOC	140.15
25-11	ST 25-11	VOC	140.15
25-12	ST 25-12	VOC	140.15
25-13	ST 25-13	VOC	140.15
25-14	ST 25-14	VOC	140.15

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES SHORT-TERM

AIR CONTAMINANTS DATA			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u> lb/hr
25-15	ST 25-15	VOC	140.15
25-16	ST 25-16	VOC	140.15
25-17	ST 25-17	VOC	140.15
25-18	ST 25-18	VOC	140.15
25-19	ST 25-19	VOC	140.15
25-20	ST 25-20	VOC	140.15
25-21	ST 25-21	VOC	120.13
25-22	ST 25-22	VOC	120.13
25-23	ST 25-23	VOC	120.13
25-24	ST 25-24	VOC	120.13
25-25	ST 25-25	VOC	120.13
25-26	ST 25-26	VOC	120.13
25-27	ST 25-27	VOC	120.13
25-28	ST 25-28	VOC	120.13
25-29	ST 25-29	VOC	120.13
25-30	ST 25-30	VOC	120.13
31	ST 31	VOC	140.15
32	ST 32	VOC	200.21
37	ST 37	VOC	120.13

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES SHORT-TERM

AIR CONTAMINANTS DATA			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u> lb/hr
40-1	ST 40-1	VOC	120.13
50-1	ST 50-1	VOC	0.01
50-2	ST 50-2	VOC	0.01
50-3	ST 50-3	VOC	1.94
80-9	ST 80-9	VOC	200.21
80-10	ST 80-10	VOC	200.21
80-11	ST 80-11	VOC	200.21
80-12	ST 80-12	VOC	200.21
80-13	ST 80-13	VOC	200.21
80-14	ST 80-14	VOC	200.21
80-15	ST 80-15	VOC	200.21
80-16	ST 80-16	VOC	200.21
80-17	ST 80-17	VOC	200.21
80-18	ST 80-18	VOC	200.21
80-19	ST 80-19	VOC	200.21
80-20	ST 80-20	VOC	200.21
80-21	ST 80-21	VOC	380.40
80-22	ST 80-22	VOC	380.40
90-1	ST 90-1	VOC	0.97

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES SHORT-TERM

AIR CONTAMINANTS DATA			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u> lb/hr
90-2	ST 90-2	VOC	0.97
100-1	ST 100-1	VOC	23.44
100-2	ST 100-2	VOC	23.44
100-3	ST 100-3	VOC	23.44
100-4	ST 100-4	VOC	23.44
100-5	ST 100-5	VOC	2.47
100-6	ST 100-6	VOC	2.47
100-7	ST 100-7	VOC	2.59
100-8	ST 100-8	VOC	2.59
100-9	ST 100-9	VOC	2.59
100-10	ST 100-10	VOC	2.26
100-11	ST 100-11	VOC	2.08
100-12	ST 100-12	VOC	2.08
100-13	ST 100-13	VOC	2.56
100-14	ST 100-14	VOC	2.56
100-15	ST 100-15	VOC	1.86
100-16	ST 100-16	VOC	1.86
100-17	ST 100-17	VOC	1.86
100-18	ST 100-18	VOC	1.86

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES SHORT-TERM

AIR CONTAMINANTS DATA			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u> lb/hr
100-19	ST 100-19	VOC	1.86
100-20	ST 100-20	VOC	2.03
100-21	ST 100-21	VOC	0.01
100-23	ST 100-23	VOC	0.55
100-24	ST 100-24	VOC	0.55
125-1	ST 125-1	VOC	1.14
150-101	ST 150-101	VOC	2.00
150-102	ST 150-102	VOC	2.00
150-103	ST 150-103	VOC	2.00
150-104	ST 150-104	VOC	2.33
150-105	ST 150-105	VOC	2.33
150-106	ST 150-106	VOC	2.33
150-107	ST 150-107	VOC	2.33
150-108	ST 150-108	VOC	2.33
150-109	ST 150-109	VOC	2.33
150-110	ST 150-110	VOC	2.33
150-111	ST 150-111	VOC	2.33
150-112	ST 150-112	VOC	2.33
150-113	ST 150-113	VOC	2.33



EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES SHORT-TERM

AIR CONTAMINANTS DATA			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr
150-114	ST 150-114	VOC	2.33
150-115	ST 150-115	VOC	2.33
144-1	ST 144-1	VOC	23.44
187-1	ST 187-1	VOC	23.44
187-1	ST 187-1	VOC (7)	2.16
Storage Tanks	Total Hourly (lb/hr) Landing Cap	VOC (5)	726.00
TR-1	Truck Rack No. 1 Loading Losses (9 Truck Spots) VP < 0.50 psia Uncontrolled and VP > 0.50 psia Controlled	VOC	170.37 (18.93 lb/hr/Spot)
TR-6	Truck Rack No. 6 Loading Losses (1 truck Spot) VP <0.50 psia Uncontrolled and VP >0.50 psia Controlled	VOC	18.93
TR-10	Truck Rack No. 10 Loading Losses (43 Truck Spots) VP <0.50 psia Uncontrolled and VP >0.50 psia Controlled	VOC	813.99 (18.93 lb/hr/Spot)
TR-11	Truck Rack No. 11 Loading Losses (15 Truck Spots) VP <0.50 psia Uncontrolled and VP >0.50 psia Controlled	VOC	283.95 (18.93 lb/hr/Spot)
TR-12	Truck Rack No. 12 Loading Losses (9 Truck Spots) VP <0.50 psia Uncontrolled and VP >0.50 psia Controlled	VOC	170.37 (18.93 lb/hr/Spot)
TR-13	Truck Rack No. 13 Loading	VOC	132.51

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES SHORT-TERM

AIR CONTAMINANTS DATA			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr
	Losses (7 Truck Spots) VP <0.50 psia Uncontrolled and VP >0.50 psia Controlled		(18.93 lb/hr/Spot)
C-RCR	Central Railcar Rack Loading Losses (35 Rail Spots) VP <0.50 psia Uncontrolled and VP >0.50 psia Controlled	VOC	662.55 (18.93 lb/hr/Spot)
E-RCR	East Railcar Rack Loading Losses (24 Rail Spots) VP <0.50 psia Uncontrolled and VP >0.50 psia Controlled	VOC	454.32 (18.93 lb/hr/Spot)
W-RCR	West Railcar Rack Loading Losses (34 Rail Spots) VP <0.50 psia Uncontrolled and VP >0.50 psia Controlled	VOC	643.62 (18.93 lb/hr/Spot)
SHPDK-1	Ship Dock No. 1 Loading Losses VP <0.50 psia Uncontrolled	VOC	113.60
SHPDK-2	Ship Dock No. 2 Loading Losses VP <0.50 psia Uncontrolled	VOC	113.60
SHPDK-3	Ship Dock No. 3 Loading Losses VP <0.50 psia Uncontrolled	VOC	113.60
BGDK-1	Barge Dock No. 1 Loading Losses VP <0.50 psia Uncontrolled	VOC	94.67
BGDK-2	Barge Dock No. 2 Loading	VOC	94.67

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES SHORT-TERM

AIR CONTAMINANTS DATA			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr
	Losses VP <0.50 psia Uncontrolled		
BD3-LDFUG	Barge Dock No. 3 Loading Losses VP <0.50 psia Uncontrolled	VOC	11.34
BOILER-4	Steam Boiler No. 4 (14.70 MMBtu/hr fired duty)	CO	0.22
		NO <sub>x</sub>	1.47
		PM <sub>10</sub>	0.01
		SO <sub>2</sub>	0.01
		VOC	0.06
VCU System No. 1 (VCU-1A and VCU-1B)	TR, RC, and Marine VCU Tank 125-1 and 187-1 Controlled Roof Landings	CO	28.91
		NO <sub>x</sub>	11.73
		SO <sub>2</sub>	0.02
		VOC	51.18
Flare System No. 2 (FL-2a, FL-2b, and FL-2c)	TR, RC, and Marine Flares	CO	12.96
		NO <sub>x</sub>	1.51
		SO <sub>2</sub>	0.0
		VOC	31.81
SUMP-1	Wastewater Sumps	VOC	5.67
TK-DEGAS	Controlled Tank Degassing (8)	VOC	124.31
		NO <sub>x</sub>	3.43
		CO	6.85
TK-ATMDEGAS	Uncontrolled Tank Degassing (9)	VOC	103.35
BD3-PIPEFUG	Barge Dock No. 3 Process Fugitives (4)	VOC	0.05
BIOFUG	Biodiesel Process Fugitives (4)	VOC	0.04
FUG	Process Fugitives (4)	VOC	6.51

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES SHORT-TERM

AIR CONTAMINANTS DATA			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr
FUG-125-1	Storage Tank No. 125-1 Process Fugitives (4)	VOC	0.09
TKFUG-ESTPLT	East Plant Fugitives	VOC	0.79
TNK-VCU-1A and TNK-VCU-1B	East Plant Roof Landing VCU No. 1A and No. 1B Emissions Cap	VOC	20.45
		NO <sub>x</sub>	65.73
		CO	131.22
		SO <sub>2</sub>	0.16
SD-4-VCU	Ship Dock No. 4 VCU (VP >0.5 psia, controlled) (6)	VOC	8.92
		Benzene	0.14
		NO <sub>x</sub>	12.39
		CO	24.74
		SO <sub>2</sub>	0.01
SD-4-LOADFUG	Ship Dock No. 4 Loading Fugitives (6)	VOC	89.23
		Benzene	1.36
SD-4-PIPEFUG	Ship Dock No. 4 Piping Fugitives	VOC	0.14
CAMU	Corrective Action Management Unit	VOC	0.05
MSS Cap	MSS Activities (6)	VOC	27.39
		Benzene	21.56
		NO <sub>x</sub>	1.50
		CO	54.44

- (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  
CO - carbon monoxide  
NO<sub>x</sub> - total oxides of nitrogen  
PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter  
SO<sub>2</sub> - sulfur dioxide
- (4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES SHORT-TERM

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u> lb/hr
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- (5) Hourly emissions cap covers the simultaneous re-fill emissions from IFR tanks with roofs landed as allowed by Special Condition No. 28 and emissions from tank roof landings attributable to routine product changes and planned maintenance, startup, and shutdown (MSS) activities as represented in Special Condition No. 22.
- (6) Benzene is included in VOC.
- (7) Effective upon start of operation of the Tank 187-1 Retrofit Project (permit amendment submitted June 2, 2009).
- (8) Hourly cap covers emissions from controlled tank degassing attributable to routine product changes and planned MSS activities as represented in Special Condition No. 22.
- (9) Hourly cap covers emissions from uncontrolled tank degassing attributable to routine product changes and planned MSS activities as represented in Special Condition No. 22.

Dated July 27, 2010

## ATTACHMENT A.2

Permit Number 2193

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES ANNUAL

This table lists the maximum allowable emission rates (annual) 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 the 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)	<u>Emission Rates *</u> TPY **
BOILER-4	Steam Boiler No. 4 (14.7 MMBtu/hr fired duty)	CO	0.97
		NO <sub>x</sub>	6.44
		PM <sub>10</sub>	0.06
		SO <sub>2</sub>	0.04
		VOC	0.26
VCU System No. 1 (VCU-1A and VCU-1B)	TR, RC, and Marine VCU	CO	30.17
		NO <sub>x</sub>	3.52
		SO <sub>2</sub>	0.01
		VOC	61.00
	Tank 125-1 Controlled Roof Landings	CO	7.81
		NO <sub>x</sub>	3.91
		SO <sub>2</sub>	0.02
		VOC	0.77
	Tank 187-1 Controlled Roof Landings (8)	CO	8.46
		NO <sub>x</sub>	4.24
		SO <sub>2</sub>	0.02
		VOC	1.95

# AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * TPY **
Flare System No. 2 (FL-2a, F-2b, and FL2-c)	TR, RC, and Marine Flares	CO	30.17
		NO <sub>x</sub>	3.52
		SO <sub>2</sub>	0.01
		VOC	61.00
	Barge and Ship Emission Losses Uncontrolled	VOC	5.62
	Rail and Truck Racks Emission Losses Uncontrolled	VOC	45.00
BD3-LDFUG	Barge Dock No. 3 Loading Losses VP <0.50 psia	VOC	2.32
	Uncontrolled		
Sump-1	Wastewater Sumps	VOC	2.85
TK-DEGAS	Annual Controlled Tank Degassing (11)	NO <sub>x</sub>	1.01
		CO	2.03
	Annual Controlled Degassing Tank Maintenance Sub-Cap (9)	NO <sub>x</sub>	0.04
		CO	0.07
Storage Tanks	Total Annual (TPY) Cap (5)	VOC	481.57
Storage Tanks	Total Annual (TPY) Cap (5), (7)	VOC	413.00

# AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * TPY **
Storage Tanks	Total Annual (TPY) Cap (5), (8)	VOC	410.00
	Annual Tank Maintenance Sub-Cap (10)	VOC	18.19

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES ANNUAL

BD3-PIPEFUG	Barge Dock No. 3 Process Fugitives (4)	VOC	0.22
BIOFUG	Biodiesel Process Fugitives (4)	VOC	0.17
FUG	Process Fugitives (4)	VOC	28.49
FUG-125-1	Storage Tank No. 125-1 Process Fugitives (4)	VOC	0.41
TKFUG-ESTPLT	East Plant Fugitives	VOC	3.44
TNK-VCU-CAP	East Plant Roof Landing VCU No 1A and 1B Annual Emissions Cap	VOC	10.48
		NO <sub>x</sub>	22.56
		CO	45.03
		SO <sub>2</sub>	0.04
SD-4-VCU	Ship Dock No. 4 VCU (6)	VOC	6.01
		Benzene	0.05
		NO <sub>x</sub>	8.94
		CO	17.84
		SO <sub>2</sub>	0.01
SD-4-LOADFUG	Ship Dock No. 4 Loading Fugitives (6)	VOC	61.30
		Benzene	0.59
SD-4-PIPEFUG	Ship Dock No. 4 Piping Fugitives	VOC	0.60
CAMU	Corrective Action Management Unit	VOC	0.11

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u> TPY **
MSS Cap	MSS Activities (6)	VOC	0.57
		Benzene	0.45
		NO <sub>x</sub>	0.03
		CO	0.10

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.



EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES ANNUAL

- (2) Specific point source name. For fugitive sources use area name or fugitive source name.
- (3) CO - carbon monoxide  
NO<sub>x</sub> - total oxides of nitrogen  
SO<sub>2</sub> - sulfur dioxide  
PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter  
VOC - volatile organic compounds 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.
- (5) Annual emissions cap for tanks covers routine emissions as well emissions from tank roof landings, controlled tank degassing, and uncontrolled tank degassing attributable to routine product changes and planned maintenance, startup, and shutdown (MSS) activities.
- (6) Benzene is included in VOC.
- (7) Effective upon start of operation of any of the 12 East Plant Expansion Project Tanks (Tank Nos. 150-104 through 150-115).
- (8) Effective upon start of operation of the Tank 187-1 Project (permit amendment submitted June 2, 2009).
- (9) Annual Controlled Tank Degassing Maintenance Sub-Cap covers emissions from controlled tank degassing attributable planned MSS activities as represented in Special Condition No. 22.A. Cap is a sub-cap of Annual Controlled Tank Degassing annual cap.
- (10) Annual Tank Maintenance Sub-Caps cover emissions from tank roof landings, controlled tank degassing, and uncontrolled tank degassing attributable to planned MSS activities as represented in Special Condition No. 22.A. Cap is a subcap of Total Annual Storage Tank (tons per year) Cap.
- (11) Annual Controlled Tank Degassing cap covers emissions from controlled tank degassing attributable to routine product changes and planned MSS activities.

\* 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

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

Dated July 27, 2010