Permit No. 1078

Attachment A.1

These attachments (A.1 and A.2) list 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.

Term			Short-
Emission Point No. (1) hour	Source Name (2)	Contaminant Name (3)	Emission Rates * Pounds per
ST 1-1	Tank 1-1	VOC	40.04
ST 1-2	Tank 1-2	VOC	40.04
ST 4-1	Tank 4-1	VOC	40.04
ST 8-1	Tank 8-1	VOC	40.04
ST 12-1	Tank 12-1	VOC	100.11
ST 12-2	Tank 12-2	VOC	100.11
ST 12-3	Tank 12-3	VOC	100.11
ST 12-4	Tank 12-4	VOC	100.11
ST 12-5	Tank 12-5	VOC	100.11
ST 12-6	Tank 12-6	VOC	100.11
ST 12-7	Tank 12-7	VOC	100.11
ST 12-8	Tank 12-8	VOC	100.11

_			Short-
Term Emission Point No. (1)	Source Name (2)	Contaminant Name (3)	Emission Rates * Pounds per
<u>hour</u>			
ST 12-9	Tank 12-9	VOC	100.11
ST 12-10	Tank 12-10	VOC	100.11
ST 12-11	Tank 12-11	VOC	100.11
ST 12-12	Tank 12-12	VOC	100.11
ST 12-13	Tank 12-13	VOC	100.11
ST 12-14	Tank 12-14	VOC	100.11
ST 12-15	Tank 12-15	VOC	100.11
ST 12-16	Tank 12-16	VOC	100.11
ST 12-17	Tank 12-17	VOC	100.11
ST 12-18	Tank 12-18	VOC	100.11
ST 12-19	Tank 12-19	VOC	100.11
ST 12-20	Tank 12-20	VOC	100.11
ST 12-21	Tank 12-21	VOC	100.11
ST 12-22	Tank 12-22	VOC	100.11
ST 12-23	Tank 12-23	VOC	100.11
ST 12-24	Tank 12-24	VOC	100.11
ST 12-25	Tank 12-25	VOC	100.11
ST 12-26	Tank 12-26	VOC	100.11

Term			Short-
Emission	Source	Contaminant	Emission Rates *
Point No. (1)	Name (2)	Name (3)	Pounds per
<u>hour</u>			
ST 12-27	Tank 12-27	VOC	100.11
ST 12-28	Tank 12-28	VOC	100.11
ST 12-29	Tank 12-29	VOC	100.11
ST 12-30	Tank 12-30	VOC	100.11
ST 12-31	Tank 12-31	VOC	100.11
ST 12-32	Tank 12-32	VOC	100.11
ST 12-33	Tank 12-33	VOC	100.11
ST 12-34	Tank 12-34	VOC	100.11
ST 12-35	Tank 12-35	VOC	100.11
ST 12-36	Tank 12-36	VOC	100.11
ST 12-37	Tank 12-37	VOC	100.11
ST 12-38	Tank 12-38	VOC	100.11
ST 12-39	Tank 12-39	VOC	100.11
ST 12-40	Tank 12-40	VOC	100.11
ST 12-41	Tank 12-41	VOC	100.11
ST 12-42	Tank 12-42	VOC	100.11

Та жи			Short-
Term Emission Point No. (1) hour	Source Name (2)	Contaminant Name (3)	Emission Rates * Pounds per
ST 12-43	Tank 12-43	VOC	100.11
ST 12-44	Tank 12-44	VOC	100.11
ST 12-45	Tank 12-45	VOC	100.11
ST 12-46	Tank 12-46	VOC	100.11
ST 12-47	Tank 12-47	VOC	100.11
ST 12-48	Tank 12-48	VOC	100.11
ST 12-49	Tank 12-49	VOC	100.11
ST 12-50	Tank 12-50	VOC	100.11
ST 12-51	Tank 12-51	VOC	100.11
ST 12-52	Tank 12-52	VOC	100.11
ST 12-53	Tank 12-53	VOC	100.11
ST 25-5	Tank 25-5	Acrylic Acid	22.5
ST 25-6	Tank 25-6	Acrylic Acid	22.5
ST 30-1	Tank 30-1	VOC	100.11
ST 30-2	Tank 30-2	VOC	100.11
ST 30-3	Tank 30-3	VOC	100.11
ST 30-4	Tank 30-4	VOC	100.11

Term			Short-
Emission	Source	Contaminant	Emission Rates *
Point No. (1)	Name (2)	Name (3)	Pounds per
<u>hour</u>			
ST 30-5	Tank 30-5	VOC	100.11
ST 30-6	Tank 30-6	VOC	100.11
ST 30-7	Tank 30-7	VOC	100.11
ST 30-8	Tank 30-8	VOC	100.11
ST 33-1	Tank 33-1	VOC	100.11
ST 33-2	Tank 33-2	VOC	100.11
ST 35-4	Tank 35-4	VOC	100.11
ST 35-5	Tank 35-5	VOC	100.11
ST 35-6	Tank 35-6	VOC	100.11
ST 35-7	Tank 35-7	VOC	100.11
ST 35-8	Tank 35-8	VOC	100.11
ST 35-9	Tank 35-9	VOC	100.11
ST 35-10	Tank 35-10	VOC	100.11
ST 35-11	Tank 35-11	VOC	100.11
ST 35-12	Tank 35-12	VOC	100.11
ST 35-13	Tank 35-13	VOC	100.11

AIR CONTAMINANTS DATA**

Term			Snort-
Emission Point No. (1)	Source Name (2)	Contaminant Name (3)	Emission Rates * Pounds per
hour	Name (2)	Name (3)	Tourius per
ST 35-14	Tank 35-14	VOC	100.11
ST 35-15	Tank 35-15	VOC	100.11
ST 36-1	Tank 36-1	VOC	100.11
ST 36-2	Tank 36-2	VOC	100.11
ST 36-3	Tank 36-3	VOC	100.11
ST 36-4	Tank 36-4	VOC	100.11
ST 36-5	Tank 36-5	VOC	100.11
ST 50-1	Tank 50-1	VOC	100.11
ST 80-1	Tank 80-1	VOC	280.3
ST 80-2	Tank 80-2	VOC	280.3
ST 80-3	Tank 80-3	VOC	280.3
ST 80-4	Tank 80-4	VOC	280.3
ST 80-5	Tank 80-5	VOC	280.3
ST 80-6	Tank 80-6	VOC	280.3
ST 80-7	Tank 80-7	VOC	280.3
ST 80-8	Tank 80-8	VOC	280.3
ST 80-9	Tank 80-9	VOC	280.3

To 1511			Short-
Term Emission Point No. (1)	Source Name (2)	Contaminant Name (3)	Emission Rates * Pounds per
<u>hour</u>			
ST 80-10	Tank 80-10	VOC	280.3
ST 80-11	Tank 80-11	VOC	280.3
ST 80-12	Tank 80-12	VOC	280.3
ST 80-13	Tank 80-13	VOC	280.3
ST 80-14	Tank 80-14	VOC	280.3
ST 80-15	Tank 80-15	VOC	280.3
ST 80-16	Tank 80-16	VOC	280.3
ST 80-17	Tank 80-17	VOC	280.3
ST 80-18	Tank 80-18	VOC	280.3
ST 80-19	Tank 80-19	VOC	280.3
ST 80-20	Tank 80-20	VOC	280.3
ST 80-21	Tank 80-21	VOC	280.3
ST 80-22	Tank 80-22	VOC	280.3
ST 80-23	Tank 80-23	VOC	280.3
ST 80-24	Tank 80-24	VOC	280.3
ST 80-25	Tank 80-25	VOC	280.3

AIR CONTAMINANTS DATA**

Term			31101 L-
Emission Point No. (1)	Source Name (2)	Contaminant Name (3)	Emission Rates * Pounds per
<u>hour</u>			
ST 80-26	Tank 80-26	VOC	280.3
ST 80-27	Tank 80-27	VOC	280.3
ST 80-28	Tank 80-28	VOC	280.3
ST 80-29	Tank 80-29	VOC	280.3
ST 80-30	Tank 80-30	VOC	280.3
ST 80-31	Tank 80-31	VOC	280.3
ST 80-32	Tank 80-32	VOC	280.3
ST 80-33	Tank 80-33	VOC	280.3
ST 80-34	Tank 80-34	VOC	280.3
ST 80-35	Tank 80-35	VOC	280.3
ST 80-36	Tank 80-36	VOC	280.3
ST 80-37	Tank 80-37	VOC	280.3
ST 80-38	Tank 80-38	VOC	280.3
ST 100-1**	Tank 100-1	VOC	2.36
ST 100-2**	Tank 100-2	VOC	2.36
ST 100-3**	Tank 100-3	VOC	2.36
ST 100-4**	Tank 100-4	VOC	2.36

Тоит			Short-
Term Emission Point No. (1)	Source Name (2)	Contaminant Name (3)	Emission Rates * Pounds per
<u>hour</u>			
ST 100-5**	Tank 100-5	VOC	2.36
ST 100-6**	Tank 100-6	VOC	2.36
ST 100-7**	Tank 100-7	VOC	2.05
ST 100-8**	Tank 100-8	VOC	2.05
ST 100-9**	Tank 100-9	VOC	2.05
ST 100-10**	Tank 100-10	VOC	2.05
ST 100-11**	Tank 100-11	VOC	1.61
ST 100-12**	Tank 100-12	VOC	1.61
ST 100-13**	Tank 100-13	VOC	1.61
ST 100-14**	Tank 100-14	VOC	1.61
ST 100-15**	Tank 100-15	VOC	1.61
ST 100-16**	Tank 100-16	VOC	1.61
ST 160-1	Tank 160-1	VOC	280.3
ST 160-2	Tank 160-2	VOC	280.3
ST 160-3	Tank 160-3	VOC	280.3
ST 160-4	Tank 160-4	VOC	280.3

Term			Short-
Emission <u>Point No. (1)</u>	Source Name (2)	Contaminant Name (3)	Emission Rates * Pounds per
<u>hour</u>			
ST 160-5	Tank 160-5	VOC	280.3
ST 160-6	Tank 160-6	VOC	280.3
TRK-A1	Track A1	VOC	264.6
	(14 Car Spots)	(18.9 lb/hr/	car spot)
TRK-A2	Track A2	VOC	264.6
	(14 Car Spots)	(18.9 lb/hr/	car spot)
TRK-B1	Track B1	VOC	264.6
	(14 Car Spots)	(18.9 lb/hr/	car spot)
TRK-B2	Track B2	VOC	264.6
	(14 Car Spots)	(18.9 lb/hr/	car spot)
TRK-B3	Track B3	VOC	189.0
	(10 Car Spots)	(18.9 lb/hr/	car spot)
TRK-C1	Track C1	VOC	151.2
	(8 Car Spots)	(18.9 lb/hr/	car spot)
TRK-C2	Track C2	VOC	151.2
	(8 Car Spots)	(18.9 lb/hr/	car spot)
TRK-D	Track D	VOC	170.4
	(9 Car Spots)	(18.9 lb/hr/	car spot)
TRK-E	Track E	VOC	170.4
	(9 Car Spots)	(18.9 lb/hr/	car spot)
TRK-F1	Track F1	VOC	113.4

AIR CONTAMINANTS DATA**

Short-Term Emission Source Contaminant Emission Rates * Name (2) Point No. (1) Name (3) Pounds per hour (6 Car Spots) (18.9 lb/hr/car spot) VOC TRK-F2 Track F2 113.4 (18.9 lb/hr/car spot) (6 Car Spots) Track F3 V0C TRK-F3 113.4 (6 Car Spots) (18.9 lb/hr/car spot) V0C TRK-G1 Track G1 189.0 (10 Car Spots) (18.9 lb/hr/car spot) TRK-G2 Track G2 VOC 189.0 (10 Car Spots) (18.9 lb/hr/car spot) Track H V0C TRK-H 151.2 (8 Car Spots) (18.9 lb/hr/car spot) Lubrizol R-Rack VOC 56.8 LUB RACK (3 Truck Spots) (18.9 lb/hr/truck spot) 1ST 12s TR RACK First 12s Truck Rack VOC 227.2 (12 Truck Spots) (18.9 lb/hr/truck spot) 2ND 12s TR RACK Second 12s Truck Rack V0C 227.2 (12 Truck Spots) (18.9 lb/hr/truck spot) First 80s Truck Rack V0C 1ST 80s TR RACK 227.2 (18.9 lb/hr/truck spot) (12 Truck Spots) C-TR RACK C-Truck Rack VOC 75.6 (4 Truck Spots) (18.9 lb/hr/truck spot)

Та изи			Short-
Term Emission	Source	Contaminant	Emission Rates *
Point No. (1) hour	Name (2)	Name (3)	Pounds per
F-TR RACK	F-Truck Rack	VOC	75.6
I IN WACK	(4 Truck Spots)	(18.9 lb/hr/t	
TR RACK G	Truck Rack G	VOC	227.2
	(12 Truck Spots)	(18.9 lb/hr/t	ruck spot)
TR RACK H	Truck Rack H	VOC	189.0
	(10 Truck Spots)	(18.9 lb/hr/t	.ruck spot)
BGDK-1	Barge Dock No. 1	VOC	94.7
BGDK-2	Barge Dock No. 2	VOC	94.7
BGDK-3	Barge Dock No. 3	VOC	94.7
BGDK-4	Barge Dock No. 4	VOC	94.7
BGDK-5	Barge Dock No. 5	VOC	94.7
BGDK-6	Barge Dock No. 6	VOC	94.7
BGDK-7	Barge Dock No. 7	VOC	94.7
BGDK-8	Barge Dock No. 8	VOC	94.7
BGDK-9	Barge Dock No. 9	VOC	94.7
BGDK-10	Barge Dock No. 10	VOC	94.7
BGDK-BKR	Bunker Fuel Dock	VOC	94.7
SHPDK-1	Ship Dock No. 1	VOC	113.6
SHPDK-2	Ship Dock No. 2	VOC	113.6

AIR CONTAMINANTS DATA**

Term			
Emission Point No. (1)	Source Name (2)	Contaminant Name (3)	Emission Rates * Pounds per
<u>hour</u>			
SHPDK-3	Ship Dock No. 3	VOC	113.6
SHPDK-7	Ship Dock No. 7	VOC	113.6
SHPDK-8	Ship Dock No. 8	VOC	113.6
FL-12s	12s Truck and Railcar Flare	VOC CO NO _x HC1/HBr	54.1 29.7 3.5 12.72
FL-105-1	Tank 105-1 Flare	VOC CO NO _x	100.0 110.0 12.8
FL-105-2	Tank 105-2 Flare	VOC CO NO _x	100.0 110.0 12.8
FL-105-3	Tank 105-3 Flare	VOC CO NO _x	100.0 110.0 12.8
FL-SPR	Spheres Flare	VOC CO NO _x	200.0 110.0 12.8
FL-50-2	Tank 50-2 Flare	VOC CO NO _x	32.0 16.8 1.96
FL-80s	80s Truck and Railcar Flare	VOC CO	23.6 13.0

AIR CONTAMINANTS DATA**

Term			
Emission	Source	Contaminant	Emission Rates *
Point No. (1)	Name (2)	Name (3)	<u>Pounds</u> per
hour			
		NO_x	1.5
		HC1/HBr	12.72
FL-3	Marine Loading	VOC	122.00
	Flare No. 3	CO	63.7
		NO_x	7.43
		HC1	14.77
		HBr	16.5
FL-5A	Marine Loading	VOC	122.00
	Flare No. 5A	CO	63.7
		NO_x	7.43
		HC1	14.77
		HBr	16.5

AIR CONTAMINANTS DATA**

Term Emission	Source	Contaminant	Emission Rates *
Point No. (1)	Name (2)	Name (3)	<u>Pounds</u> per
<u>hour</u>			
FL-5B	Marine Loading	VOC	122.00
	Flare No. 5B	CO	63.7
		NO _x	7.43
		HCl HBr	14.77 16.5
		וטו	10.5
FL-5C	Marine Loading	VOC	122.00
	Flare No. 5C	CO	63.7
		NO _x	7.43
		HC1	14.77
		HBr	16.5
FL-5D	Marine Loading	VOC	122.00
	Flare No. 5Ď	CO	63.7
		NO_x	7.43
		HC1	14.77
		HBr	16.5
FL-5E	Marine Loading	VOC	122.00
	Flare No. 5E	CO	63.7
		NO_x	7.43
		HC1	14.77
		HBr	16.5
FL-5F	Marine Loading	VOC	122.00
	Flare No. 5F	CO	63.7
		NO_x	7.43
		HC1	14.77
		HBr	16.5
FL-5G	Marine Loading	VOC	122.00
	Flare No. 5G	CO	63.7
		NO_x	7.43

Томм			Short-	
Term Emission Point No. (1) hour	Source Name (2)	Contaminant Name (3)	Emission Rates * Pounds per	
<u>nour</u>		HC1 HBr	14.77 16.5	
FUG	Fugitive Emissions (4))	VOC 5.3	

Da	ted	

Permit No. 1078

Attachment A.2

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Annual Emission
Rates * Point No. (1) Year	Name (2)	Name (3)	Tons per
1-1 through 160-	·6 202.5	Storage Tanks	VOC
	Truck and Rail L All Spots (no	•	5.3
BGDK-1 through 1 and BGDK-BKR	.0 All Docks (no	Barge and Ship Loading controls)	VOC 11.7
SHPDK-1, 2, 3, 7, and 8			
FL-12s, FL-50-2, FL-80s, FL-SPR FL-105-1, 2, a		ing VOC	5.1 CO 7.62 NO _x 0.89
, ,		HCl HBr	2.33† 4.0†
FL-3, 5A through	i 5G	Flares-Marine Loading CO NO _x HCl HBr	VOC 20.9 31.5 4.2 2.33† 4.0†
FUG	Fugitives (4)	VOC	23.2

The following applies to Attachments A.1 and A.2:

- (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.

Permit No. 1078 Page 2

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(3) VOC - volatile organic compounds as defined in 30 Texas Administrative Code Section 101.1

 NO_x - total oxides of nitrogen

CO - carbon monoxide HCl - hydrochloric acid HBr - hydrobromic acid

- (4) Fugitive emissions are estimates only.
- * Emission rates are based on continuous operation.
- ** All short-term tank emission rates are based on fixed-roof tanks except Tank Nos. 100-1 to 100-16 which are based on internal floating roof tanks storing methyl-tert-butyl ether.
- † Total facility HCl emissions shall not exceed 2.33 ton per year (tpy) and total facility HBr emissions shall not exceed 4.0 tpy.

a'	t	9	t	