

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES
Attachment A.1

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES
SHORT-TERM
Permit No. 1078

These attachments (A.1, A.2, A.3, A.4) 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.

AIR CONTAMINANTS DATA**
Short-Term

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

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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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Short-Term	
			<u>Emission Rates*</u> lb/hr	
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
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

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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

Emission Point No. (1)	Source Name (2)	Short-Term	
		Air Contaminant Name (3)	<u>Emission Rates*</u> lb/hr
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 12-54	Tank 12-54	VOC	100.11
ST 12-55	Tank 12-55	VOC	100.11
ST 12-56	Tank 12-56	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

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ST 30-3	Tank 30-3	VOC	100.11
ST 30-4	Tank 30-4	VOC	100.11
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 30-9	Tank 30-9	VOC	100.11

Emission Point No. (1)	Source Name (2)	Short-Term	
		Air Contaminant Name (3)	<u>Emission Rates*</u> lb/hr
ST 30-10	Tank 30-10	VOC	100.11
ST 30-11	Tank 30-11	VOC	100.11
ST 30-12	Tank 30-12	VOC	100.11
ST 30-13	Tank 30-13	VOC	100.11
ST 30-14	Tank 30-14	VOC	100.11
ST 30-15	Tank 30-15	VOC	100.11
ST 30-16	Tank 30-16	VOC	100.11
ST 30-17	Tank 30-17	VOC	100.11
ST 30-18	Tank 30-18	VOC	100.11
ST 30-19	Tank 30-19	VOC	100.11
ST 30-20	Tank 30-20	VOC	100.11
ST 30-21	Tank 30-21	VOC	100.11
ST 30-22	Tank 30-22	VOC	100.11
ST 30-23	Tank 30-23	VOC	100.11

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ST 30-24	Tank 30-24	VOC	100.11
ST 30-25	Tank 30-25	VOC	100.11
ST 30-26	Tank 30-26	VOC	100.11
ST 30-27	Tank 30-27	VOC	100.11
ST 30-28	Tank 30-28	VOC	100.11
ST 30-29	Tank 30-29	VOC	100.11
ST 33-1	Tank 33-1	VOC	100.11
ST 33-2	Tank 33-2	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

Emission Point No. (1)	Source Name (2)	Short Term	
		Air Contaminant Name (3)	<u>Emission Rates*</u> lb/hr
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

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ST 80-8	Tank 80-8	VOC	280.3
ST 80-9	Tank 80-9	VOC	280.3
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

Emission Point No. (1)	Source Name (2)	Short-Term	
		Air Contaminant Name (3)	<u>Emission Rates*</u> lb/hr
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
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

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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 80-39	Tank 80-39	VOC	280.3
ST 80-40	Tank 80-40	VOC	280.3
ST 80-41	Tank 80-41	VOC	280.3
ST 80-42	Tank 80-42	VOC	280.3
ST 80-43	Tank 80-43	VOC	280.3
ST 80-44	Tank 80-44	VOC	280.3
ST 80-45	Tank 80-45	VOC	280.3
ST 80-46	Tank 80-46	VOC	280.3
ST 160-1	Tank 160-1	VOC	280.3

Emission Point No. (1)	Source Name (2)	Short-Term	
		Air Contaminant Name (3)	<u>Emission Rates*</u> lb/hr
ST 160-2	Tank 160-2	VOC	280.3
ST 160-3	Tank 160-3	VOC	280.3

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ST 160-4	Tank 160-4	VOC	280.3
ST 160-5	Tank 160-5	VOC	280.3
ST 160-6	Tank 160-6	VOC	280.3
ST 200-1	Tank 200-1 (5)	VOC	2.25
ST 200-2	Tank 200-2 (5)	VOC	2.25
ST 200-3	Tank 200-3 (5)	VOC	2.25
ST 200-4	Tank 200-4 (5)	VOC	2.25
ST 200-5	Tank 200-5 (5)	VOC	2.25
TRK-A1	Track A1 (14 Car Spots)	VOC (18.9 lb/hr/car spot)	264.6
TRK-A2	Track A2 (14 Car Spots)	VOC (18.9 lb/hr/car spot)	264.6
TRK-B1	Track B1 (14 Car Spots)	VOC (18.9 lb/hr/car spot)	264.6
TRK-B2	Track B2 (14 Car Spots)	VOC (18.9 lb/hr/car spot)	264.6
TRK-B3	Track B3 (10 Car Spots)	VOC (18.9 lb/hr/car spot)	189.0
TRK-C1	Track C1 (8 Car Spots)	VOC (18.9 lb/hr/car spot)	151.2
TRK-C2	Track C2 (8 Car Spots)	VOC (18.9 lb/hr/car spot)	151.2
TRK-D	Track D (9 Car Spots)	VOC (18.9 lb/hr/car spot)	170.4
TRK-E	Track E (9 Car Spots)	VOC (18.9 lb/hr/car spot)	170.4
TRK-F1	Track F1 (6 Car Spots)	VOC (18.9 lb/hr/car spot)	113.4

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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

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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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Short-Term	
			<u>Emission Rates*</u> lb/hr	
BGDK-9	Barge Dock No. 9	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
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 Rail Car Flare	VOC		54.1
		CO		29.7
		NOx		3.5
FL-105-1	Tank 105-1 Flare	VOC		100.0
		CO		110.0
		NOx		12.8
FL-105-2	Tank 105-2 Flare	VOC		100.0
		CO		110.0
		NOx		12.8
FL-105-3	Tank 105-3 Flare	VOC		100.0
		CO		110.0
		NOx		12.8
FL-SPR	Spheres Flare	VOC		200.0
		CO		110.0
		NOx		12.8
FL-50-2	Tank 50-2 Flare	VOC		32.0
		CO		16.8
		NOx		1.96
FL-80s	80s Truck and Rail Car Flare	VOC		23.6
		CO		13.0
		NOx		1.5
FL-3	Marine (Benzene)	VOC		41.3

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FL-4	Loading Flare No. 3	CO	22.7
		NOx	2.65
	Marine Loading Flare No. 4	VOC	63.7
		CO	33.3
		NOx	3.9

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Short-Term

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates*</u> lb/hr
FL-5(††) (FUTURE)	Marine Loading Flare No. 5	VOC	41.3
		CO	22.7
		NOx	2.65
FL-6(††) (FUTURE)	Marine Loading Flare No. 6	VOC	41.3
		CO	22.7
		NOx	2.65
FUG	Fugitive Emissions (4)	VOC	5.2

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES
ATTACHMENT A.2
ANNUAL
January 1, 1993 Through December 31, 1993
Permit No. 1078

AIR CONTAMINANTS DATA				Annual
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates*</u> tpy	
	Land and Marine Operations	VOC	647.1	
	Land Flare Products of Combustion	CO	7.62	
		NOx	0.89	
	Marine Flare Products of Combustion	CO	30.70	
		NOx	4.10	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES
ATTACHMENT A.3
ANNUAL

After January 1, 1994 and
Prior to Completion of Modifications Permit No. 1078

AIR CONTAMINANTS DATA

			Annual	
Emission	Source	Air Contaminant	<u>Emission Rates*</u>	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>tpy</u>	
	Land and Marine Operations	VOC	558.1	
	Land Flare Products of Combustion	CO	7.62	
		NOx	0.89	
	Marine Flare Products of Combustion	CO	31.53	
		NOx	4.20	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES
ATTACHMENT A.4
ANNUAL

After Modifications†Permit No. 1078

AIR CONTAMINANTS DATA				
Annual				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates*</u> tpy	
1-1 thru 200-5	Storage Tanks	VOC	206.2	
	Truck Loading, All Spots (no controls)	VOC	3.1	
TRK A thru G, LUB RACK	Rail Loading, All Spots (no controls)	VOC	2.2	
BGDK-1 thru 9 and BGDK-BKR	Barge Loading, All Docks (no controls)	VOC	8.8	
SHPDK-1, 2, 3, 7 and 8	Ship Loading, All Docks (no controls)	VOC	2.9	
FL-12s, FL-50-2, FL-80s, FL-SPR, FL-105-1, 2 and 3	Flares-Land Loading	VOC	5.1	
		CO	7.62	
		NOx	0.89	
FL-3, 4, 5 and 6	Flares-Marine Loading	VOC	20.9	
		CO	31.5	
		NOx	4.2	
FUG	Fugitives (4)	VOC	22.6	

The following applies to Attachments A.1, A.2, A.3, and A.4:

- (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 General Rule 101.1
NOx - total oxides of nitrogen
CO - carbon monoxide
 - (4) Fugitive emissions are estimates only.
 - (5) Short-term emissions are for natural gas condensate in an internal floating roof tank.
- * Emission rates are based on and the facilities are limited by the following maximum operating schedule:

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

** All short-term tank emission rates are based on fixed-roof tanks.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

† These are the annual allowables that must be met within three years of permit issuance.

†† These flares must be constructed and operational within 3 years of issuance of the consolidated permit, in accordance with Special Provision 16.

Hrs/day 24 Days/week 7 Weeks/year 52 or Hrs/year

Dated