FACILITY PERMIT REVIEW SHEET

DATE: 2/6/2013 **APPLICATION NUMBER:** 0310188-011-AF

FACILITY NAME: TransMontaigne Terminals, LLC

FACILITY DESCRIPTION: Bulk Petroleum Terminal and Marine Loading Terminal

PERMIT PROCESSOR: C. Blane Johnson

MAJOR FOR CRITERIA POLLUTANTS AND/OR HAP's (Circle)

PM SO_2 NO_X CO PB O_3 HAP

SUBJECT TO: (Circle)

NSR(PSD)	PERMIT NUMBER:	
NSR(NAA)	PERMIT NUMBER:	
BACT	EU NUMBER:	018
MACT	EU NUMBER:	022
RACT	EU NUMBER:	
NSPS	EU NUMBER:	023, 024

FACILITY EMISSION SUMMARY

	POTENTIAL EMISSIONS	ALLOWABLE EMISSIONS	
	TPY	LBS/HR	TPY
PM	3.50		
SO_2	7.6		
NO_X	21.4		
CO	12.7		
CO_2	23,945		
O_3			
PB	8.00E-05		
VOC	11.24		
TOTAL HAP	2.23		
SINGLE HAP (highest)	0.69		

COMMENTS: Highest HAP is Benzene.

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310188-011-AF **EU NUMBER:** 010

REFERENCES: Operation permit renewal application and EPA TANKS 4.09 program

POLLUTANT: Volatile Organic Compounds (VOC's)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
	<100			250,000,000 gal/yr

POTENTIAL EMISSION CALCULATIONS

Truck Loading Rack Emissions - 1.93 tons/yr

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-210	2.301

COMMENTS: Potential emissions based on loading #2 Fuel Oil only.

POLLUTANT: Hazardous Air Pollutants (HAP's)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
	<25 & <10			250,000,000 gal/yr

POTENTIAL EMISSION CALCULATIONS

Truck Loading Rack Emissions - 0.37 tons/yr

Highest HAP is Benzene at 0.13 tons/yr.

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-210	2.301

COMMENTS: Potential emissions based on loading #2 Fuel Oil only.

PERMIT PROCESSOR: _____ **DATE:** _____

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310188-011-AF **EU NUMBER:** 018 (#2 F.O.)

REFERENCES: Operation permit renewal application and AP-42 Section 1.3

POLLUTANT: Particulate Matter (PM)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
		20		

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

9.0	140	3.3	8760	=	1,858	lb/yr
				=	0.9	ton/yr

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL
	62-296.406	2.1101

COMMENTS: Emission factor is combined "Filterable PM" (=2) and "Condensable PM" (=1.3).

POLLUTANT: Sulfur Dioxide (SO_2)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x % sulfur content of fuel x (hr/yr) = PTE

9.0	140	142	0.05	8760	=	3,998	lb/yr
					=	2.0	ton/yr

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL
	62-296.406	2.1101

COMMENTS: Maximum fuel oil sulfur content limited to 0.05% by weight.

POLLUTANT: Nitrogen Oxides (NO_x)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

9.0	140	20	8760	=	11,263	lb/yr
				=	5.6	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Carbon Monoxide (CO)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

9.0	140	5	8760	=	2,816	lb/yr
				=	1.4	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Carbon Dioxide (CO_2)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

9.0	140	22,300	8760	=	12,558,086	lb/yr
				=	6,279	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Volatile Organic Compounds (VOC)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

9.0	140	5.56E-01	8760	=	313.1	lb/yr
				=	0.2	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Hazardous Air Pollutants (HAPs)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

9.0	140	7.88E-02	8760	=	44.4	lb/yr
				=	0.02	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS: Highest HAP, Formaldehyde (6.10E-2 lb/1000 gal) = 34.4 lb/yr.

PERMIT PROCESSOR: _____ **DATE:** _____

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310188-011-AF **EU NUMBER:** 018 (N.G.)

REFERENCES: Operation permit renewal application and AP-42 Section 1.4

POLLUTANT: Particulate Matter

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
		20		

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

9.0	1,020	7.6	=	0.07	lb/hr
			=	0.29	tpy

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62.296.320(4)(b)1	2.1101

COMMENTS:

POLLUTANT: Sulfur Dioxide (SO_2)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

9.0	1,020	0.60	=	0.01	lb/hr
				0.02	tpy

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Nitrogen Oxides (NO_X)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

9.0	1,020	100	=	0.88	lb/hr
				3.86	tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Carbon Monoxide (CO)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

9.0	1,020	84	=	0.74	lb/hr
				3.25	tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Carbon Dioxide (CO_2)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

9.0	1,020	120,000	=	1,059	lb/hr
				4,638	tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Lead (Pb)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

9.0	1,020	0.0005	=	0.000004	lb/hr
				0.00002	tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: VOC

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

9.0	1,020	5.50	=	0.05 lb/hr 0.21 tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Hazardous Air Pollutants (HAP)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

9.0	1,020	1.89	=	0.02 lb/hr 0.07 tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS: Highest HAP, Hexane (1.80 lb/MMft^3) = 139.1 lb/yr.

PERMIT PROCESSOR: _____ **DATE:** _____

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310188-011-AF **EU NUMBER:** 019

REFERENCES: Operation permit renewal application and EPA TANKS 4.09 program

POLLUTANT: Volatile Organic Compounds (VOC's)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
	<100			

POTENTIAL EMISSION CALCULATIONS

Tank Emissions - 6.58 tons/yr

Fugitive Emissions - 0.29 tons/yr

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-210	2.301

COMMENTS: Based on 500,000,000 gallons per year throughput which is twice the permitted throughput.

POLLUTANT: Hazardous Air Pollutants (HAP's)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
	<25 & <10			

POTENTIAL EMISSION CALCULATIONS

Tank Emissions - 1.25 tons/yr

Fugitive Emissions - 0.02 tons/yr

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-210	2.301

COMMENTS: Based on 500,000,000 gallons per year throughput which is twice the permitted throughput. Highest HAP is Benzene at 0.45 tons/yr.

PERMIT PROCESSOR: _____ **DATE:** _____

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310188-011-AF **EU NUMBER:** 022

REFERENCES: Operation permit renewal application and EPA TANKS 4.09 program

POLLUTANT: Volatile Organic Compounds (VOC's)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
	<100			250,000,000 gal/yr

POTENTIAL EMISSION CALCULATIONS

Barge Loading Emissions - 1.61 tons/yr

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-210	2.301

COMMENTS: Potential emissions based on loading #2 Fuel Oil only.

POLLUTANT: Hazardous Air Pollutants (HAP's)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
	<25 & <10			250,000,000 gal/yr

POTENTIAL EMISSION CALCULATIONS

Barge Loading Rack Emissions - 0.30 tons/yr

Highest HAP is Benzene at 0.11 tons/yr.

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-210	2.301

COMMENTS: Potential emissions based on loading #2 Fuel Oil only.

PERMIT PROCESSOR: _____ **DATE:** _____

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310188-011-AF **EU NUMBER:** 023 (#2 F.O.)

REFERENCES: Operation permit renewal application and AP-42 Section 1.3

POLLUTANT: Particulate Matter (PM)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
		20		

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

12.7	140	3.3	8,760	=	2,614	lb/yr
				=	1.3	ton/yr

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-296.406	2.1101

COMMENTS: Emission factor is combined "Filterable PM" (=2) and "Condensable PM" (=1.3).

POLLUTANT: Sulfur Dioxide (SO_2)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x % sulfur content of fuel x (hr/yr) = PTE

12.7	140	142	0.05	8,760	=	5,624	lb/yr
					=	2.8	ton/yr

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-296.406	2.1101

COMMENTS: Maximum fuel oil sulfur content limited to 0.05% by weight.

POLLUTANT: Nitrogen Oxides (NO_x)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

12.7	140	20	8,760	=	15,843	lb/yr
				=	7.9	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Carbon Monoxide (CO)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

12.7	140	5	8,760	=	3,961	lb/yr
				=	2.0	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Carbon Dioxide (CO_2)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

12.7	140	22,300	8,760	=	17,665,041	lb/yr
				=	8,833	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Volatile Organic Compounds (VOC)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

12.7	140	5.56E-01	8,760	=	440.4	lb/yr
				=	0.2	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Hazardous Air Pollutants (HAPs)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

12.7	140	7.88E-02	8,760	=	62.4	lb/yr
				=	0.03	ton/yr

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS: Highest HAP, Formaldehyde (6.10E-2 lb/1000 gal) = 34.4 lb/yr.

PERMIT PROCESSOR: _____ **DATE:** _____

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310188-011-AF **EU NUMBER:** 023 (N.G.)

REFERENCES: Operation permit renewal application and AP-42 Section 1.4

POLLUTANT: Particulate Matter

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
		20		

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	7.6	=	0.10	lb/hr
			=	0.43	tpy

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62.296.320(4)(b)1	2.1101

COMMENTS:

POLLUTANT: Sulfur Dioxide ($SO_{2)}$

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	0.60	=	0.01	lb/hr
				0.03	tpy

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Nitrogen Oxides (NO_X)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	100	=	1.28	lb/hr
				5.62	tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Carbon Monoxide (CO)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	84	=	1.08	lb/hr
				4.72	tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Carbon Dioxide (CO_2)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	120,000	=	1,539	lb/hr
				6,740	tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Lead (Pb)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	0.0005	=	0.000006	lb/hr
				0.00003	tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: VOC

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	5.50	=	0.07 lb/hr 0.31 tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Hazardous Air Pollutants (HAP)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	1.89	=	0.02 lb/hr 0.11 tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS: Highest HAP, Hexane (1.80 lb/MMft^3) = 202.2 lb/yr.

PERMIT PROCESSOR: _____ **DATE:** _____

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310188-011-AF **EU NUMBER:** 024 (#2 F.O.)

REFERENCES: Operation permit renewal application and AP-42 Section 1.3

POLLUTANT: Particulate Matter (PM)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
		20		

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

12.7	140	3.3	8,760	=	2,614	lb/yr
				=	1.3	ton/yr

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-296.406	2.1101

COMMENTS: Emission factor is combined "Filterable PM" (=2) and "Condensable PM" (=1.3).

POLLUTANT: Sulfur Dioxide (SO_2)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x % sulfur content of fuel x (hr/yr) = PTE

12.7	140	142	0.05	8,760	=	5,624	lb/yr
					=	2.8	ton/yr

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-296.406	2.1101

COMMENTS: Maximum fuel oil sulfur content limited to 0.05% by weight.

POLLUTANT: Nitrogen Oxides (NO_x)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

12.7	140	20	8,760	=	15,843	lb/yr
				=	7.9	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Carbon Monoxide (CO)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

12.7	140	5	8,760	=	3,961	lb/yr
				=	2.0	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Carbon Dioxide (CO_2)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

12.7	140	22,300	8,760	=	17,665,041	lb/yr
				=	8,833	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Volatile Organic Compounds (VOC)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

12.7	140	5.56E-01	8,760	=	440.4	lb/yr
				=	0.2	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Hazardous Air Pollutants (HAPs)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

12.7	140	7.88E-02	8,760	=	62.4	lb/yr
				=	0.03	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS: Highest HAP, Formaldehyde (6.10E-2 lb/1000 gal) = 34.4 lb/yr.

PERMIT PROCESSOR: _____ **DATE:** _____

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310188-011-AF **EU NUMBER:** 024 (N.G.)

REFERENCES: Operation permit renewal application and AP-42 Section 1.4

POLLUTANT: Particulate Matter

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
		20		

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	7.6	=	0.10	lb/hr
			=	0.43	tpy

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62.296.320(4)(b)1	2.1101

COMMENTS:

POLLUTANT: Sulfur Dioxide ($SO_{2)}$

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	0.60	=	0.01	lb/hr
				0.03	tpy

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Nitrogen Oxides (NO_X)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	100	=	1.28	lb/hr
				5.62	tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Carbon Monoxide (CO)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	84	=	1.08	lb/hr
				4.72	tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Carbon Dioxide (CO_2)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	120,000	=	1,539	lb/hr
				6,740	tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Lead (Pb)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	0.0005	=	0.000006	lb/hr
				0.00003	tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: VOC

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	5.50	=	0.07 lb/hr 0.31 tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Hazardous Air Pollutants (HAP)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / (MMBtuU/MMft3) X AP-42 EF (lb/MMft^3) = PTE

13.1	1,020	1.89	=	0.02 lb/hr 0.11 tpy

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS: Highest HAP, Hexane (1.80 lb/MMft^3) = 202.2 lb/yr.

PERMIT PROCESSOR: _____ **DATE:** _____

Effective 2/27/97