EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310496-005-AO **EU NUMBER:** 001,002, & 003

REFERENCES: 0310496-005-AO application, 0310496-003-AO
COMMENTS: Calculations are for the entire facility. To determine individual test cells, divide results by 3.

POLLUTANT: Particulate Matter (PM)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
		20		

POTENTIAL EMISSION CALCULATIONS

(gallons per hour) X (MMBTU per gallon) X (AP-42 EF) = PTE

2500	0.139	0.012		=	4.17 lb/hr

(gallons per year) X (MMBTU per gallon) X (AP-42 EF) / (pounds per ton) = PTE

450000	0.139	0.012	2000	=	0.38 tpy

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-296.320(4)(b)1	2.1101

COMMENTS:

POLLUTANT: Total Organic Compounds (VOC)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

(gallons per hour) X (MMBTU per gallon) X (AP-42 EF) = PTE

2500	0.139	4.00E-03		=	1.39 lb/hr

(gallons per year) X (MMBTU per gallon) X (AP-42 EF) / (pounds per ton) = PTE

450000	0.139	4.00E-03	2000	=	0.13 tpy

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-210.300(3)(b)	2.301

COMMENTS:

POLLUTANT: Volatile Organic Compounds (VOC)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

(gallons per hour) X (MMBTU per gallon) X (AP-42 EF) = PTE

2500	0.139	4.10E-04		=	0.14 lb/hr

(gallons per year) X (MMBTU per gallon) X (AP-42 EF) / (pounds per ton) = PTE

450000	0.139	4.10E-04	2000	=	0.01 tpy

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-210.300(3)(b)	2.301

COMMENTS:

POLLUTANT: Nitrogen Oxides (NO_x)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

(gallons per hour) X (MMBTU per gallon) X (AP-42 EF) = PTE

2500	0.139	0.88		=	305.8 lb/hr

(gallons per year) X (MMBTU per gallon) X (AP-42 EF) / (pounds per ton) = PTE

450000	0.139	0.88	2000	=	27.52 tpy

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Sulfur Dioxide (SO_2)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

(gallons per hour) X (MMBTU per gallon) X (AP-42 EF) = PTE

2500 0.139 9.09E-04 = 0.3 lb/hr

(gallons per year) X (MMBTU per gallon) X (AP-42 EF) / (pounds per ton) = PTE

450000 0.139 9.09E-04 2000 = 0.03 tpy

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-210.300(3)(b)	2.301

COMMENTS: Highest Sulfur content in fuel is 9 ppm ($9.0X10^{-4}$ %)

POLLUTANT: Carbon Monoxide (CO)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

(gallons per hour) X (MMBTU per gallon) X (AP-42 EF) = PTE

2500 0.139 3.30E-03 = 1.1 lb/hr

(gallons per year) X (MMBTU per gallon) X (AP-42 EF) / (pounds per ton) = PTE

450000 0.139 3.30E-03 2000 = 0.10 tpy

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-210.300(3)(b)	2.301

COMMENTS:

HAP Emissions

Pollutant	Process Rate (gal/hr)	Process Rate (gal/yr)	Heat Content of #2 Fuel Oil (MMBTU/gal)	Emission Factor (lb/MMBTU)	Conversion Factor (lb/ton)	Potential Emissions (lb/hr)	Potential Emissions (tons/yr)
1,3-Butadiene	2500	450000	0.139	1.60E-05	2000	5.56E-03	5.00E-04
Benzene	2500	450000	0.139	5.50E-05	2000	1.91E-02	1.72E-03
Formaldehyde	2500	450000	0.139	2.80E-04	2000	9.73E-02	8.76E-03
Naphthalene	2500	450000	0.139	3.50E-05	2000	1.22E-02	1.09E-03
Arsenic	2500	450000	0.139	1.10E-05	2000	3.82E-03	3.44E-04
Beryllium	2500	450000	0.139	3.10E-07	2000	1.08E-04	9.70E-06
Cadmium	2500	450000	0.139	4.80E-06	2000	1.67E-03	1.50E-04
Chromium	2500	450000	0.139	1.10E-05	2000	3.82E-03	3.44E-04
Lead	2500	450000	0.139	1.40E-05	2000	4.87E-03	4.38E-04
Manganese	2500	450000	0.139	7.90E-04	2000	2.75E-01	2.47E-02
Mercury	2500	450000	0.139	1.20E-06	2000	4.17E-04	3.75E-05
Nickel	2500	450000	0.139	4.60E-06	2000	1.60E-03	1.44E-04
Selenium	2500	450000	0.139	2.50E-05	2000	8.69E-03	7.82E-04
					Total	4.34E-01	3.90E-02

= highest

PERMIT PROCESSOR: _____ **DATE:** _____

Effective 2/27/97