

May 16, 2003

Scott Litmer
Wood-Mizer
8180 West 10th Street
Indianapolis, Indiana 46214

Re: Registered Construction and Operation Status,
097-12613-00394

Dear Mr. Litmer:

The application from Wood-Mizer, received on February 19, 2002, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.1-2, it has been determined that the following woodworking operation, to be located at 8180 West 10th Street, Indianapolis, Indiana 46214 is classified as registered:

- (a) Welding operations, identified as B9, consisting of twelve (12) MIG weld stations each with a maximum capacity of 4.5 pounds per hour (lbs/hr), one (1) aluminum MIG weld station with a maximum capacity of 4.5 pounds per hour (lbs/hr), two (2) TIG weld stations each with a maximum capacity of 4.5 pounds per hour, three (3) oxyacetylene cutters each with a maximum capacity of 18 inches per minute, and one (1) portable arc welder, exhausting to stack B9.
- (b) Woodworking operations in the Customer Service Department, identified as B8, with a maximum capacity of 3,900 cubic feet per minute (cfm) of wood, using a baghouse and cyclone for particulate control, and vented internally.
- (c) Woodworking operations in the Wood Products Building, identified as F1, with a maximum capacity of 15,500 cubic feet per minute (cfm) of wood, using a baghouse and cyclone for particulate control, and vented internally.
- (d) Equipment testing activities, identified as B7, conducted in the Customer Service Department, with the capacity to operate five (5) 42 horse power (hp) diesel engines, and exhausting to stack B7.
- (e) Equipment testing activities, identified as H5, conducted in the Research and Development Department, with the capacity to operate three (3) 42 horse power (hp) diesel engines, exhausting to stack H5.
- (f) Gasoline and diesel dispensing activities consisting of one (1) five hundred (500) gallon gasoline tank and two (2) five hundred (500) gallon diesel tanks.

- (g) Natural gas fired space heaters with combined heat input less than ten (10) million Btu per hour (MMBtu/hr).
- (h) One (1) lead solder unit, identified as H2, with a maximum capacity of 20 pounds of lead per week, exhausting to stack H3.
- (i) Two (2) infrared bake ovens, identified as B4 and B5, with no potential to emit volatile organic compounds, exhausting to stacks B4 and B5.
- (j) Blade shaping operations, identified as H1, in which a cutting coolant continuously floods the machining interface, with no potential to emit, exhausting to H1.

The following conditions shall be applicable:

- (a) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period. Pursuant to 326 IAC 5-1-3 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:
- (b) Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations, Work Practices and Control Technologies), the rate of emissions from the welding operations, identified as B9, shall not exceed 0.551 pounds per hour of particulate matter.

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.1-2(f)(3). The annual notice shall be submitted to:

**Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015
and
Office of Environmental Services
Air Quality Management Section, Compliance Data Group
2700 South Belmont Avenue
Indianapolis, Indiana 46221-2097**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

Wood-Mizer
Indianapolis, Indiana
Permit Reviewer: Angelique Oliger

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An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original Signed by John B. Chavez
John B. Chavez, Administrator

aco

cc: File, Marion County
Air Compliance
IDEM, Mindy Hahn
Permits, Angelique Oliger

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3).

Company Name:	Wood-Mizer
Address:	8180 West 10th Street
City:	Indianapolis, Indiana 46214
Authorized individual:	Scott Litmer
Phone #:	(317) 271-1542
Registration #:	097-12613-00394

I hereby certify that Wood-Mizer is still in operation and is in compliance with the requirements of Registration 097-12613-00394.

Name (typed):
Title:
Signature:
Date:

**Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services**

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name: Wood-Mizer
Source Location: 8180 West 10th Street, Indianapolis, Indiana 46214
County: Marion
SIC Code: 3553, 3567
Operation Permit No.: 097-12613-00394
Permit Reviewer: Angelique Oligier

The Office of Environmental Services (OES) has reviewed an application from Wood-Mizer relating to woodworking operations.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) Welding operations, identified as B9, consisting of twelve (12) MIG weld stations each with a maximum capacity of 4.5 pounds per hour (lbs/hr), one (1) aluminum MIG weld station with a maximum capacity of 4.5 pounds per hour (lbs/hr), two (2) TIG weld stations each with a maximum capacity of 4.5 pounds per hour, three (3) oxyacetylene cutters each with a maximum capacity of 18 inches per minute, and one (1) portable arc welder, exhausting to stack B9.
- (b) Woodworking operations in the Customer Service Department, identified as B8, with a maximum capacity of 3,900 cubic feet per minute (cfm) of wood, using a baghouse and cyclone for particulate control, and vented internally.
- (c) Woodworking operations in the Wood Products Building, identified as F1, with a maximum capacity of 15,500 cubic feet per minute (cfm) of wood, using a baghouse and cyclone for particulate control, and vented internally.
- (d) Equipment testing activities, identified as B7, conducted in the Customer Service Department, with the capacity to operate five (5) 42 horse power (hp) diesel engines, and exhausting to stack B7.
- (e) Equipment testing activities, identified as H5, conducted in the Research and Development Department, with the capacity to operate three (3) 42 horse power (hp) diesel engines, exhausting to stack H5.
- (f) Gasoline and diesel dispensing activities consisting of one (1) five hundred (500) gallon gasoline tank and two (2) five hundred (500) gallon diesel tanks.

- (g) Natural gas fired space heaters with combined heat input less than ten (10) million Btu per hour (MMBtu/hr).
- (h) One (1) lead solder unit, identified as H2, with a maximum capacity of 20 pounds of lead per week, exhausting to stack H3.
- (i) Two (2) infrared bake ovens, identified as B4 and B5, with no potential to emit volatile organic compounds, exhausting to stacks B4 and B5.
- (j) Blade shaping operations, identified as H1, in which a cutting coolant continuously floods the machining interface, with no potential to emit, exhausting to H1.

Stack Summary

Stack ID	Operation	Height (feet)	Dimensions (feet)	Flow Rate (acfm)	Temperature (°F)
B4	B4	0	1 x 1	NA	208
B5	B5	0	1 x 1	NA	208
B7	B7	20	0.5 x 1.0	1600	ambient
B9	B9	16.2	0.42 (diam)	NA	ambient
H1	H1	10	0.3 x 1.0	NA	ambient
H3	H2	8	1.3 x 1.3	NA	ambient
H5	H5	20	0.5 x 1.0	1600	ambient

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Administrator that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 9, 1996, with additional information received on August 17, 2000 and February 19, 2002.

Emission Calculations

See Appendix A (eight (8) pages) of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	16.63

PM-10	16.63
SO ₂	7.63
VOC	7.59
CO	3.81
NO _x	5.02

HAP's	Potential To Emit (tons/year)
Mn	0.15
Pb	1.66
TOTAL	1.81

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM is equal to or greater than five (5) tons per year and less than twenty-five (25) tons per year. The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is also equal to or greater than five (5) tons per year and less than twenty-five (25) tons per year. The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants is less than twenty-five (25) tons per year. Therefore, the source is registered and subject to the provisions of 326 IAC 2-5.1-2.
- (b) **Fugitive Emissions**
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO ₂	maintenance attainment
NO ₂	attainment
Ozone	maintenance attainment
CO	attainment
Lead	unclassifiable

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Marion County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) **Fugitive Emissions**
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and

volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	16.63
PM10	16.63
SO ₂	7.63
VOC	7.59
CO	3.81
NO _x	5.02
Single HAP	1.66
Combination HAPs	1.81

- (a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source. 40 CFR Part 63 Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations) does not apply to this source because this is not a major source as defined in 40 CFR part 63, subpart A, §63.2.

State Rule Applicability - Entire Source

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

This source will emit less than ten (10) tons per year of a single HAP or twenty-five (25) tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Marion County, the potential to emit VOC and NO_x is less than ten (10) tons per year and its potential to emit PM is less than one-hundred (100) tons per year including fugitive emissions, therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1(Opacity Limitations)

The Opacity regulation 326 IAC 5-1 is generally applicable to all point sources of emissions. Since the source is located in Marion County, and is not located in the areas of Marion County referred to in 326 IAC 5-1-5, pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1 (Non Attainment Area Limitations)

Since the source does not have the potential to emit greater than 100 tons per year of particulate matter, or actual emissions of greater than 10 tons per year of particulate matter, and it is not one of the sources listed in 326 IAC 6-1-12, 326 IAC 6-1 does not apply.

326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices and Control Technologies)

Pursuant to 326 IAC 6-3-2(e), the allowable particulate matter emissions rate from the welding operations, identified as B9, shall be controlled by the following equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{Rate of emission in pounds per hour;} \\ P = \text{Process weight rate in tons per hour.}$$

Pursuant to 326 IAC 6-3-2(e)(2), when the process weight is less than one hundred (100) pounds per hour, the allowable rate of emission is five hundred fifty-one thousandths (0.551) pound per hour. The welding operation, identified as B9, have a maximum process weight rate less than 100 pounds per hour. Therefore, the rate of emissions from B9 shall not exceed 0.551 pounds per hour of particulate matter.

Conclusion

This operation of woodworking shall be subject to the conditions of the attached proposed Registration 097-12613-00394.

Company Name: Wood-mizer
Address City IN Zip: 8180 West 10th Street, Indianapolis, Indiana 46214
CP: 097-12613-00394
Reviewer: Angelique Olinger
Date: April 30, 2003

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Submerged Arc	0	0		0.036	0.011			0.000	0.000	0.000	0	0.000
Metal Inert Gas (MIG)(carbon steel)	13	4.5		0.0241	0.0005			1.410	0.029	0.000	0	0.029
Stick (E7018 electrode)	0	0		0.0211	0.0009			0.000	0.000	0.000	0	0.000
Tungsten Inert Gas (TIG)(carbon steel)	2	4.5		0.0055	0.0005			0.050	0.005	0.000	0	0.005
Oxyacetylene(carbon steel)	0	0		0.0055	0.0005			0.000	0.000	0.000	0	0.000
FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	3	1	18	0.1622	0.0005	0.0001	0.0003	0.526	0.000	0.000	0.000	0.000
Oxymethane	0			0.0815	0.0002		0.0002	0.000	0.000	0.000	0.000	0.000
Plasma**	0			0.0039				0.000	0.000	0.000	0.000	0.000
EMISSION TOTALS												
Potential Emissions lbs/hr								1.98				0.03
Potential Emissions lbs/day								47.64				0.81
Potential Emissions tons/year								8.69				0.15

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8

Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick

Plasma cutting emissions, lb/hr: (# of stations)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 8 mm thick)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

Welding and other flame cutting emission factors are from an internal training session document, "Welding and Flame Cutting". See Rebecca Mason if you need a copy.

Refer to AP-42, Chapter 12.19 for additional emission factors for welding.

welding.wk4 (11/99)

Appendix A: Emissions Calculations

Industrial Boilers (> 100 mmBtu/hr)

#1 and #2 Fuel Oil

Equipment Testing Activities

Company Name: Wood-Mizer

Address, City IN Zip: 8180 West 10th Street

CP: 097-12613-00394

Reviewer: Angelique Oliger

Date: April 30, 2003

3 engines @ 42 hp	Heat Input Capacity	Potential Throughput	S = Weight % Sulfur
5 engines @ 42 hp	MMBtu/hr	kgals/year	<input type="text" value="2"/>
	<input type="text" value="0.8551"/>	53.50608	

Emission Factor in lb/kgal	Pollutant				
	PM*	SO2	NOx	VOC	CO
	3.3	284 (142.0S)	24.0	0.20	5.0
Potential Emission in tons/yr	0.088	7.598	0.642	0.005	0.134

Methodology

3 engines * 42 hp / engine * (2545 Btu/hr) / 1 hp * (1 MMBtu/hr) / (1e6 Btu/hr) = 0.321 MMBtu/hr

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-02-005-01/02/03) Supplement E 9/98

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

**Appendix A: Emissions Calculations
Industrial Boilers (> 100 mmBtu/hr)
#1 and #2 Fuel Oil
HAPs Emissions**

**Company Name: Wood-Mizer
Address, City IN Zip: 8180 West 10th Street
CP: 097-15460-00394
Reviewer: Angelique Oliger
Date: April 30, 2003**

HAPs - Metals

Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	1.50E-05	1.12E-05	1.12E-05	1.12E-05	3.37E-05

HAPs - Metals (continued)

Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05	Total
Potential Emission in tons/yr	1.12E-05	2.25E-05	1.12E-05	5.62E-05	1.84E-04

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

**Emissions Calculations
Gasoline & Diesel Fuel Dispensing Operations**

Company Name: Wood-Mizer
Address, City IN Zip: 8180 West 10th Street
CP: 097-12613-00394
Reviewer: Angelique Oliger
Date: April 30, 2003

Unit	Throughput (gallons/yr)	Emission Rate (lb VOC / 1000 gal)	Potential Emission (tons/year)
Gasoline	78000	11	0.429
Diesel Fuel	78000	11	0.429
Diesel Fuel	78000	11	0.429
Total			1.287

**Emissions Calculations
Woodworking Activities**

Company Name: Wood-Mizer
Address, City IN Zip: 8180 West 10th Street
CP: 097-12613-00394
Reviewer: Angelique Oliger
Date: April 30, 2003

Source	Operating hours (hrs/yr)	Grain Loading (gr/dcf)	Stack Gas Flow Rate (dcfm)	Emissions of PM	
				(lbs/hr)	(tons/yr)
baghouse	8760	0.01	15,442	1.324	5.797
F1	8760	0.01	3,885	0.333	1.459
B8					
Total				1.657	7.256

**Emissions Calculations
Lead Soldering Operations**

Company Name: Wood-Mizer
Address, City IN Zip: 8180 West 10th Street
CP: 097-12613-00394
Reviewer: Angelique Oliger
Date: April 30, 2003

Material	Density (lbs/gal)	VOC content	Potential Usage (gal/wk)	Potential VOC emissions (tons/yr)
Flux	7.54	67%	20	2.63
Thinner	6.63	100%	20	3.45
Total				6.07

Material	Bar (lbs)	Lead Content	Potential Usage (lbs/wk)	Potential HAPs Emissions (tons/yr)
Lead	8	40%	20	1.66

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MM Btu/hr 0.3 - < 10**

**Company Name: Wood-Mizer
Address, City IN Zip: 8180 West 10th Street
CP: 097-12613-00394
Reviewer: Angelique Oliger
Date: April 30, 2003**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

10.0

87.6

Pollutant

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	13.7	13.7	0.6	100.0	5.3	84.0
Potential Emission in tons/yr	0.60	0.60	0.03	4.38	0.23	3.68

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36

Emission Factors for CO: uncontrolled = 21, Low NOx Burner = 27, Flue gas recirculation = ND

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emission Calculations

Company Name: Wood-Mizer
Address, City IN Zip: 8180 West 10th Street
CP: 097-12613-00394
Reviewer: Angelique Oliger
Date: April 30, 2003

SUMMARY OF CALCULATED POTENTIAL EMISSION RATES - BEFORE CONROLS

Emission Unit	PM	SO2	Nox	VOC	CO	HAPs
B9	8.69					0.15
B7 and H5	0.088	7.6	0.642	0.005	0.134	
Gasoline and Diesel Dispensing				1.287		
B8	1.459					
F1	5.797					
H2				6.07		1.66
Space Heaters	0.600	0.030	4.380	0.230	3.680	
Total	16.63	7.63	5.02	7.59	3.81	1.81
	PM	SO2	Nox	VOC	CO	HAPs