



May 23, 2006

Jim Davis
Waste Management
15505 Shively Road, PO Box 128
Wyatt, IN 46595

Certified Mail: 7000 0600 0023 5187 0229

Dear Mr. Davis:

Re: Exempt Operation Status,
097-22647-00375

The application from Waste Management, received on February 7, 2006, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the maintenance facility operation, to be located at 1000 East 56th Street, Indianapolis, Indiana, is classified as exempt from air pollution permit requirements:

- (a) One (1) touch-up & maintenance surface coating booth with a maximum capacity of 600 gallons per year, exhausting to stack 1.
- (b) Thirteen (13) natural gas heating units with a combined maximum capacity of 6.6 mmbtu/hr.
- (c) One (1) Caterpillar emergency generator with a maximum capacity of 60 kw, exhausting to stack 3.
- (d) One (1) non-VOC part cleaner with a maximum capacity of 55 gallons.
- (e) One (1) welding operation with a maximum capacity of 2,376 lb/yr.
- (f) One (1) machining operation with a maximum capacity of 1 ton/yr.
- (g) Two (2) waste oil heating units with a maximum capacity of 0.75mmbtu/hr each.

The following conditions shall be applicable:

- (1) 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 thirty percent (30%) 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.



Air Quality Hotline: 317-327-4AIR | knozone.com

Department of Public Works
Office of Environmental Services

2700 Belmont Avenue
Indianapolis, IN 46221

317-327-2234
Fax 327-2274
TDD 327-5186
indygov.org/dpw

- (2) Pursuant to 326 IAC 6-4 (Fugitive Dust) the permittee shall meet the following fugitive dust requirement:

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

This exemption is the second air approval issued to this source.

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

Sincerely,

Originally Signed by:

Felicia A. Robinson
Manager of Environmental Planning

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cc: Files – 2 copies
Air Compliance – Matt Mosier
IDEM, OAQ – Mindy Hahn
Marion County Health Department

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

Technical Support Document (TSD) for a Exemption

Source Background and Description

Source Name:	Waste Management
Source Location:	1000 East 56th Street, Indianapolis, IN 46236
County:	Marion
SIC Code:	4212
Operation Permit No.:	097-22647-00375
Permit Reviewer:	TJ Edwards

The Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ) and Indianapolis Office of Environmental Services (OES) have reviewed an application from Waste Management relating to the construction and operation of a maintenance facility.

Exempt Emission Units and Pollution Control Equipment

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

- (a) One (1) touch-up & maintenance surface coating booth with a maximum capacity of 600 gallons per year, exhausting to stack 1.
- (b) Thirteen (13) natural gas heating units with a combined maximum capacity of 6.6 mmbtu/hr.
- (c) One (1) Caterpillar emergency generator with a maximum capacity of 60 kw, exhausting to stack 3.
- (d) One (1) non-VOC part cleaner with a maximum capacity of 55 gallons.
- (e) One (1) welding operation with a maximum capacity of 2,376 lb/yr.
- (f) One (1) machining operation with a maximum capacity of 1 ton/yr.
- (g) Two (2) waste oil heating units with a maximum capacity of 0.75mmbtu/hr each.

The surface coating booth and all heating units were located at the source at the time of purchase in 2004. Waste Management has no knowledge of precise installation dates. As far as Waste Management can ascertain, all heating units were constructed after September 21, 1983 and the surface coating booth was constructed after July 1, 1990.

Existing Approvals

- (a) Construction Permit 96-5371-01; Issued June 17, 1996.

All conditions from previous approvals are not incorporated into this exemption:

Reason not incorporated: The above mentioned Construction Permit is no longer valid as the source has since reduced their potential to emit such that the source is now exempt.

Enforcement Issue

There is no enforcement action pending at this time.

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 February 7, 2006, with additional information received on February 20, 2006.

Emission Calculations

See Appendix A pages 1 through 6 of this document for detailed emission calculations.

Potential to Emit of the Source Before Controls

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/yr)
PM	4.89
PM-10	3.92
SO ₂	Negligible
VOC	1.44
CO	Negligible
NO _x	9.36
HAPs	Negligible

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.
- (c) 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.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	Unclassifiable
PM2.5	Nonattainment
SO ₂	Maintenance attainment
NO _x	Attainment
1-hour Ozone	Maintenance attainment
8-hour Ozone	Basic nonattainment
CO	Attainment
Lead	unclassifiable

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions, pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability for the source section.
- (c) Marion County has been classified as attainment or unclassifiable in Indiana for PM10, SO₂, NO₂, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Source Status

Existing Source PSD, Part 70, or FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	4.89
PM-10	3.92
SO ₂	Negligible
VOC	1.44
CO	Negligible
NO _x	9.36
Single HAP	Negligible
Combination HAPs	Negligible

This source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater, no nonattainment pollutant is emitted at a rate of 100 tons per year or greater, and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2 and 2-3, the PSD and Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit 097-22647-00375, is still 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 per year.

This status is based on all the air approvals issued to the source. This status has been verified by the OES inspector assigned to the 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 (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source.

State Rule Applicability – Entire Source

326 IAC 2-1.1-5 (Non-attainment New Source Review)

This source is not major under nonattainment NSR because it has the potential to emit less than 100 tons of PM10 (as surrogate for PM2.5). Therefore, the Non-attainment New Source Review requirements are not applicable.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) and 326 IAC 2-3 (Emission Offset)

This source is not deemed a major stationary source because no attainment regulated pollutant emissions are equal to or greater than two hundred fifty (250) tons per year, this source is not one of the 28 listed source categories under 326 IAC 2-2 or 326 IAC 2-3, and no non-attainment regulated pollutant emissions are equal to or greater than one hundred (100) tons per year. There have been no modifications or revisions to this source that were major modifications pursuant to 326 IAC 2-2 or 326 IAC 2-3.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1(a)(1), (2), and (3), this source is not subject to 326 IAC 2-6 (Emission Reporting) because, as an Exemption, it is not required to have an operating permit under 326 IAC 2-7, it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year, and it is not located in Lake or Porter Counties.

326 IAC 5-1 (Opacity Limitations)

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 the permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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 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 6-4 (Fugitive Dust)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

State Rule Applicability – Individual Facilities

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

The operation of the maintenance facility will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Surface coating manufacturing process that use less than 5 gallons of coating per day are exempt. Therefore, 326 IAC 6-3 does not apply.

326 IAC 8-1-6 (VOC Rules)

The potential to emit of VOCs from each emission unit at the source is less than 25 tons per year. Therefore, 326 IAC 8-1-6 does not apply.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The source's actual VOC emissions of 0.62 tons per year (based on 8760 hr/yr), is less than 15 pounds per day and its potential VOC emission is less than 25 tons per year. Therefore, the source is not subject to this rule.

Conclusion

The operation of this maintenance facility shall be subject to the conditions of Exemption 097-22647-00375.

**Appendix A: Emissions Calculations
Welding and Thermal Cutting**

**Company Name: Waste Management
Address City IN Zip: 1000 E. 56th St., Indianapolis, IN 46236
Exemption No.: 097-22647-00375
Reviewer: TJ Edwards
Date: 2/22/2006**

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	1	10	0.036	0.011			0.360	0.110	0.000	0	0.110
EMISSION TOTALS											
Potential Emissions lbs/hr							0.36				0.11
Potential Emissions lbs/day							8.64				2.64
Potential Emissions tons/year							1.58				0.48

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 mm thick rather than 1 inch, and the maximum metal thickness is not used in calculating the emissions.

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 e

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.

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

Small Industrial Boiler

Company Name: Waste Management
Address City IN Zip: 1000 E. 56th St., Indianapolis, IN 46236
Exemption No.: 097-22647-00375
Reviewer: TJ Edwards
Date: 2/22/2006

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

6.6

57.8

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/	0.1	0.2	0.0	2.9	0.2	2.4

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combi

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirc

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,0

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02 (SUPPLEMENT D 3/98)

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

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#5 and #6 Fuel Oil

Company Name: Waste Management
Address City IN Zip: 1000 E. 56th St., Indianapolis, IN 46236
Exemption No.: 097-22647-00375
Reviewer: TJ Edwards
Date: 2/22/2006

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
1.50	94.53	0.044

Emission Factor in lb/kgal	Pollutant				
	PM**	SO2	NOx	VOC	CO
	10	6.88	55.0	1.13	5.0
	<i>*see below</i>	<i>(157S)</i>			
Potential Emission in tons/yr	0.5	0.3	2.6	0.1	0.2

***Particulate Matter emission factor for #5 fuel oil is 10.0 lb/kgal**

***Particulate Matter emission factor for #6 fuel oil is 9.19(s) + 3.22 lb/kgal**

**PM emission factor is filterable PM only. Condensable PM emission factor is 1.5 lb/kgal.

Methodology

1 gallon of #5 Fuel oil has a heating value of 139,000 Btu

1 gallon of #6 Fuel oil has a heating value of 150,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.139 MMBtu

Emission Factors are from AP 42 Tables 1.3-1, 1.3-2 and 1.3-3 (SCC 1-03-004-02/03, 1-02-004-02/03, and 1-03-004-04) (AP-42 Supplement E 9/98)

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

No data are available for HAPs emissions calculations

**Internal Combustion Engines - Diesel Fuel
Turbine (>250 and <600 HP)
Reciprocating**

**Company Name: Waste Management
Address City IN Zip: 1000 E. 56th St., Indianapolis, IN 46236
Exemption No.: 097-22647-00375
Reviewer: TJ Edwards
Date: 2/22/2006**

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity
MM Btu/hr

0.2

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.31	0.31	0.29	4.41	0.36	0.95
Potential Emission in tons/yr	0.27	0.27	0.25	3.86	0.32	0.83

Methodology

Potential Throughput (hp-hr/yr) = hp * 8760 hr/yr

Use a conversion factor of 7,000 Btu per hp-hr to convert from horsepower to Btu/hr, unless the source gives you a source-specific brake-specific fuel consumption. (AP-42, Footnote a, Table 3.3-1)

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-2

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

*PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

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).

Appendix A: Emission Calculations

Company Name: Waste Management

Address City IN Zip: 1000 E. 56th St., Indianapolis, IN 46236

Exemption No.: 097-22647-00375

Reviewer: TJ Edwards

Date: 2/22/2006

Potential to Emit
(tpy)

Emitting Activity	PM10	VOC	NOX	SO ₂	CO
Surface Coating	2.34	0.62			
Welding	1.58				
Tanks		0.20			
Generator	0.27	0.32	3.86	0.25	0.83
Wate Oil	0.50	0.10	2.60	0.30	0.20
NG combustion	0.20	0.20	2.90	0.00	2.40
Total	4.89	1.44	9.36	0.55	3.43