



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: May 14, 2009

RE: Mobile Drill / 097-25050-00621

FROM: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

## Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER-AM.dot12/3/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mr. Mike Johnson  
Mobile Drill, LLC  
3807 Madison Avenue  
Indianapolis, IN 46227

May 14, 2009

Re: Exempt Construction and Operation Status,  
097-25050-00621

Dear Mr. Johnson:

The application from Mobile Drill, LLC, received on July, 24, 2007, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following stationary drilling machinery manufacturing facility located at 3807 Madison Avenue, Indianapolis, IN 46227 is classified as exempt from air pollution permit requirements:

- (a) One (1) paint booth, identified as PB-1, constructed in 1966, applying coatings to metal with high volume low pressure spray (HVLP) guns, using fabric filters as particulate control, and exhausting to stack S-PB-1, and consisting of:
  - 1) One (1) coating operation with a maximum capacity of 24,595 metal drill parts/yr, with the capability of running either a DelFleet coating system or Urotec AUE coating system; and  
  
Note: Only one coating system can operate at a time.
  - 2) One (1) pre-painting and truck bedliner operation with a maximum combined solvent and coating usage of 542 gallons/yr.
- (b) One (1) large parts washer, identified as PW-1, constructed in 1980, with a maximum capacity of 55 gallons.
- (c) One (1) small parts washer, identified as PW-2, constructed in 1985, with a maximum capacity of 30 gallons.
- (d) One (1) saw for cutting wooden pallets, identified as CUT-1, constructed in 1948, with a maximum lumber capacity of 0.25 lbs/hr, using a dust collector as particulate control, and exhausting within the building.
- (e) One (1) welding operation, identified as WELD-1, constructed in 1948, consisting of:
  - (1) Six (6) metal inert gas (MIG) welding stations, nominally rated for a maximum capacity of 0.14 pounds of electrode per hour each, exhausting outside the building through various vents.
  - (2) Three (3) metal inert gas (MIG) welding stations, nominally rated for a maximum capacity of 0.09 pounds of electrode per hour each, exhausting within the building.
- (f) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, consisting of:
  - (1) One (1) natural-gas fired boiler for building heat, rated at 2.35 million British thermal units per hour (MMBtu/hr).

- (2) Twenty-two (22) natural-gas fired heaters for building heat, rated at a combined 3.30 million British thermal units per hour.

The following conditions shall be applicable:

- (a) 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 this permit:
  - (1) 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.
  - (2) 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.
- (b) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)  
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.
- (c) 326 IAC 6-3-2 (Particulate Emissions Limitations)  
Pursuant to 326 IAC 6-3-2, particulate from the coating operation and pre-painting and bedliner operation shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

- (d) 326 IAC 8-3-2 (Cold Cleaner Operations)  
The parts washer is subject to this rule because it was constructed after 1980. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator of the cold cleaning facility shall:
  - (1) Equip the cleaner with a cover;
  - (2) Equip the cleaner with a facility for draining cleaned parts;
  - (3) Close the degreaser cover whenever parts are not being handled in the cleaner;
  - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
  - (5) Provide a permanent, conspicuous label summarizing the operation requirements;
  - (6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.
- (e) 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

The part washer is subject to this rule because it was constructed after July 1, 1990 in Marion County. This degreasing operation shall comply with the following requirements.

- (1) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:
  - (a) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
    - (i) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
    - (ii) The solvent is agitated; or
    - (iii) The solvent is heated.
  - (b) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
  - (c) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
  - (d) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
  - (e) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
    - (i) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (ii) A water cover when solvent is used is insoluble in, and heavier than, water.
    - (iii) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S EPA as a SIP revision.
- (2) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
  - (a) Close the cover whenever articles are not being handled in the degreaser.
  - (b) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (c) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

This exemption is the first air approval issued to this source. A copy of the Exemption is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. For additional information about air permits

and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

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. If you have any questions on this matter, please contact Jason R. Krawczyk, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, at 317-232-8427 or at 1-800-451-6027 (ext 2-8427).

Sincerely,



Iryn Calilung, Section Chief  
Permits Branch  
Office of Air Quality

IC/JRK

cc: File - Marion County  
Marion County Health Department  
Compliance and Enforcement Branch  
Billing, Licensing and Training Section

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for an Exemption

#### Source Description and Location

**Source Name:** Mobile Drill, LLC  
**Source Location:** 3807 Madison Avenue, Indianapolis, IN 46227  
**County:** Marion  
**SIC Code:** 3533  
**Exemption No.:** 097-25050-00621  
**Permit Reviewer:** Jason R. Krawczyk

On July 24, 2007, the Office of Air Quality (OAQ) received an application from Mobile Drill, LLC related to the construction and operation of a new stationary drilling machinery manufacturing facility.

#### Existing Approvals

There have been no previous approvals issued to this source.

#### County Attainment Status

The source is located in Marion County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11 <sup>th</sup> Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.
O <sub>3</sub>	Attainment effective November 8, 2007, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Attainment effective July 10, 2000, for the part of Franklin Township bounded by Thompson Road on the south; Emerson Avenue on the west; Five Points Road on the east; and Troy Avenue on the north. Attainment effective July 10, 2000, for the part of Wayne Township bounded by Rockville Road on the north; Girls School Road on the east; Washington Street on the south; and Bridgeport Road on the west. The remainder of the county is not designated.

<sup>1</sup>Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X\*. The 1-hour designation was revoked effective June 15, 2005.

Basic nonattainment designation effective federally April 5, 2005, for PM<sub>2.5</sub>.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) 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 NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed

pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM2.5**  
Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. On May 8<sup>th</sup>, 2008, U.S. EPA promulgated specific New Source Review rules for PM2.5 emissions, and the effective date of these rules was July 15<sup>th</sup>, 2008. Therefore, direct PM2.5 and SO2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.
- (c) **Other Criteria Pollutants**  
Marion County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

### **Fugitive Emissions**

The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-1.1-3 (Exemptions) applicability.

### **Background and Description of Emission Units and Pollution Control Equipment**

The Office of Air Quality (OAQ) has reviewed an application, submitted by Mobile Drill, LLC on July 24, 2007, relating to the construction and operation of a new stationary drilling machinery manufacturing facility.

The source consists of the following existing emission units:

- (a) One (1) paint booth, identified as PB-1, constructed in 1966, applying coatings to metal with high volume low pressure spray (HVLP) guns, using fabric filters as particulate control, and exhausting to stack S-PB-1, and consisting of:
  - 1) One (1) coating operation with a maximum capacity of 24,595 metal drill parts/yr, with the capability of running either a DelFleet coating system or Urotec AUE coating system; and  
Note: Only one coating system can operate at a time.
  - 2) One (1) pre-painting and truck bedliner operation with a maximum combined solvent and coating usage of 542 gallons/yr.
- (b) One (1) large parts washer, identified as PW-1, constructed in 1980, with a maximum capacity of 55 gallons.
- (c) One (1) small parts washer, identified as PW-2, constructed in 1985, with a maximum capacity of 30 gallons.
- (d) One (1) saw for cutting wooden pallets, identified as CUT-1, constructed in 1948, with a maximum lumber capacity of 0.25 lbs/hr, using a dust collector as particulate control, and exhausting within the building.
- (e) One (1) welding operation, identified as WELD-1, constructed in 1948, consisting of:
  - (1) Six (6) metal inert gas (MIG) welding stations, nominally rated for a maximum capacity of 0.14 pounds of electrode per hour each, exhausting outside the building through various vents.

- (2) Three (3) metal inert gas (MIG) welding stations, nominally rated for a maximum capacity of 0.09 pounds of electrode per hour each, exhausting within the building.
- (f) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour, consisting of:
  - (1) One (1) natural-gas fired boiler for building heat, rated at 2.35 million British thermal units per hour (MMBtu/hr).
  - (2) Twenty-two (22) natural-gas fired heaters for building heat, rated at a combined 3.30 million British thermal units per hour.

**Enforcement Issues**

There are no pending enforcement actions related to this source.

**Emission Calculations**

See Appendix A of this TSD for detailed emission calculations.

**Permit Level Determination – Exemption**

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)								
	PM	PM10 *	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Worst Single HAP
Coating (PB-1)	0.88	0.88	0.88	negl.	negl.	3.29	negl.	0.62	0.34 Toluene
Coating Prep / Bedliner (PB-1)	0.04	0.04	0.04	negl.	negl.	1.55	negl.	0.54	0.37 Toluene
Woodworking	0.05	0.05	0.05	negl.	negl.	negl.	negl.	negl.	negl.
Welding	0.11	0.11	0.11	negl.	negl.	negl.	negl.	0.01	negl.
Cold Cleaners	negl.	negl.	negl.	negl.	negl.	4.23	negl.	negl.	negl.
Combustion	0.05	0.19	0.19	0.71	2.47	0.14	2.08	0.05	negl.
<b>Total PTE of Entire Source</b>	<b>1.14</b>	<b>1.28</b>	<b>1.28</b>	<b>0.71</b>	<b>2.47</b>	<b>9.20</b>	<b>2.08</b>	<b>1.21</b>	<b>0.71 Toluene</b>
Exemptions Levels	5	5	5	10	10	10	25	25	10
Registration Levels	25	25	25	25	25	25	100	25	10

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)								
	PM	PM10 *	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Worst Single HAP
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".  Note: Both the Coating and Coating Prep and Bedliner operations are performed in PB-1, but are considered separate processes.									

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of all regulated criteria pollutants are less than the levels listed in 326 IAC 2-1.1-3(e)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3 (Exemptions).
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

In October of 1993 a Final Order Granting Summary Judgment was signed by an Administrative Law Judge ("ALJ") Garrettson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, potential emissions for particulate matter were calculated after consideration of the controls.

**Federal Rule Applicability Determination**

New Source Performance Standards (NSPS)

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63.11169, Subpart HHHHHH (326 IAC 20-80), are not included in the permit, since this source does not perform Paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), Autobody refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations, or spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment. The source applies coatings to mobile equipment in the form of newly manufactured truck beds and does not perform refinishing operations.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63.11514, Subpart XXXXXX, are not included in the permit. Although the source falls within the Industrial Machinery and Equipment

Finishing Operations source category listed in 40 CFR 63.11514(a), it does not perform any of the operations in 40 CFR 63.11514(b) other than spray painting. The paints used do not contain metal fabrication or finishing metal HAP (MFHAP), therefore the NESHAP does not apply.

- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

#### Compliance Assurance Monitoring (CAM)

- (e) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

<b>State Rule Applicability Determination</b>
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The following state rules are applicable to the source:

- (a) 326 IAC 2-1.1-3 (Exemptions)  
Exemption applicability is discussed under the Permit Level Determination – Exemption section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (c) 326 IAC 2-6 (Emission Reporting)  
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 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 this permit:
- (1) 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.
  - (2) 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.
- (e) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)  
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.
- (f) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)  
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.

- (g) 326 IAC 6.5-6 (Particulate Matter Emission Limitations for Marion County)  
The source is not subject to the requirements of 326 IAC 6.5 because the source is not specifically listed in 326 IAC 6.5-6, and does not have the potential to emit one hundred (100) tons or more, or actual emissions of ten (10) tons or more of particulate matter.
- (h) 326 IAC 8-6-1 (Organic Solvent Emission Limitations)  
The source is located in Marion County, but is not subject to the requirements of 326 IAC 8-6-1 because the source was constructed prior to January 1, 1980. Additionally, the source does not have potential emissions of 90.7 megagrams (100 tons) or greater per year of VOC.

#### PB-1 Coating Operation

- (i) 326 IAC 6-3-2 (Particulate Emissions Limitations)  
Pursuant to 326 IAC 6-3-2, particulate from the coating operation shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

- (j) 326 IAC 8-2-9 (Volatile Organic Compounds)  
The coating operation is located in Marion County and performs miscellaneous metal coating operations; however, the source is not subject to 326 IAC 8-2-9 because it was constructed prior to November 1, 1980.

#### PB-1 Pre-Painting and Bedliner Operations

- (k) 326 IAC 6-3-2 (Particulate Emissions Limitations)  
Pursuant to 326 IAC 6-3-2, particulate from the paint booth shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

Operate equipment so that no overspray is visibly detectable at the exhaust or

accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

- (l) 326 IAC 8-2-9 (Volatile Organic Compounds)  
The pre-painting and bedliner operation is located in Marion County and performs miscellaneous metal coating operations; however, the source is not subject to 326 IAC 8-2-9 because it was constructed prior to November 1, 1980. Additionally, the pre-painting and bedliner operation has actual emissions of less than fifteen (15) pounds of VOC per day before add-on controls.

#### Parts Washers (PW-1 & PW-2)

- (m) 326 IAC 8-3-2 (Cold Cleaner Operations)  
The parts washer is subject to this rule because it was constructed after 1980. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator of the cold cleaning facility shall:
- (1) Equip the cleaner with a cover;
  - (2) Equip the cleaner with a facility for draining cleaned parts;
  - (3) Close the degreaser cover whenever parts are not being handled in the cleaner;
  - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
  - (5) Provide a permanent, conspicuous label summarizing the operation requirements;
  - (6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.
- (n) 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)  
The part washer is subject to this rule because it was constructed after July 1, 1990 in Marion County. This degreasing operation shall comply with the following requirements.
- (1) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:
    - (a) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
      - (i) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
      - (ii) The solvent is agitated; or
      - (iii) The solvent is heated.
    - (b) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (c) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
  - (d) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
  - (e) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
    - (i) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (ii) A water cover when solvent is used is insoluble in, and heavier than, water.
    - (iii) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S EPA as a SIP revision.
- (2) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
- (a) Close the cover whenever articles are not being handled in the degreaser.
  - (b) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (c) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

#### Woodworking Operation (CUT-1)

- (o) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(b)(14), the woodworking operations are exempt from the requirements of 326 IAC 6-3, because potential particulate emissions are less than five hundred fifty-one thousandths (0.551) pound per hour.

#### Welding (WELD-1)

- (p) 326 IAC 6-3 (Particulate Emission Limitations, Work Practices, and Control Technologies)  
Pursuant to 326 IAC 6-3-1(a)(9) the nine (9) metal inert gas (MIG) welding stations are exempt from the requirements of 326 IAC 6-3, because their potential to consume welding wire is less than six hundred twenty-five (625) pounds per day.

<b>Conclusion and Recommendation</b>
--------------------------------------

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 July 24, 2007.

The construction and operation of this source shall be subject to the conditions of the attached proposed Exemption No. 097-25050-00621. The staff recommends to the Commissioner that this Exemption be approved.

<b>IDEM Contact</b>
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- (a) Questions regarding this proposed permit can be directed to Jason R. Krawczyk at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 232-8427 or toll free at 1-800-451-6027 extension 2-8427.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

**SUMMARY OF EMISSIONS**

**Company Name: Mobile Drilling Company dba Foremost Mobile**  
**Address City IN Zip: 3807 Madison Avenue, Indianapolis, IN 46227**  
**Permit Number: 097-25050-00621**  
**Plt ID: 097-00621**  
**Reviewer: Jason R. Krawczyk**  
**Date: May 5, 2009**

Uncontrolled Emissions (Tons/Yr)							
Pollutant	Combustion	Coating	Coating Prep/ Bedliner	Woodworking	Welding	Cold Cleaners	Total PTE
PM	0.05	0.88	0.04	0.05	0.11	-	1.14
PM10	0.19	0.88	0.04	0.05	0.11	-	1.28
PM2.5	0.19	0.88	0.04	0.05	0.11	-	1.28
VOC	0.14	3.29	1.55	-	-	4.23	9.20
NOx	2.47	-	-	-	-	-	2.47
SO2	0.71	-	-	-	-	-	0.71
CO	2.08	-	-	-	-	-	2.08
Single HAP (Toluene)	-	0.34	0.37	-	-	-	0.71
Combined HAPs	0.05	0.62	0.54	-	0.01	-	1.21

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100**

**Company Name: Mobile Drilling Company dba Foremost Mobile**  
**Address City IN Zip: 3807 Madison Avenue, Indianapolis, IN 46227**  
**Permit Number: 097-25050-00621**  
**Plt ID: 097-00621**  
**Reviewer: Jason R. Krawczyk**  
**Date: May 5, 2009**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.35 (Boiler)	20.6
3.3 (22 Space Heaters)	28.9
<b>5.7</b>	<b>49.5</b>

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	28.5	100	5.5	84
				**see below		
Potential Emission in tons/yr	0.05	0.19	0.71	2.47	0.14	2.08

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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, and 1-03-006-03

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

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

See page 3 for HAPs emissions calculations.

**Appendix A: Emissions Calculations  
 Natural Gas Combustion Only  
 MM BTU/HR <100  
 HAPs Emissions**

**Company Name: Mobile Drilling Company dba Foremost Mobile  
 Address City IN Zip: 3807 Madison Avenue, Indianapolis, IN 46227  
 Permit Number: 097-25050-00621  
 Plt ID: 097-00621  
 Reviewer: Jason R. Krawczyk  
 Date: April 6, 2009**

	HAPs - Organics				
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	5.197E-05	2.970E-05	1.856E-03	4.454E-02	8.414E-05

	HAPs - Metals				
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.237E-05	2.722E-05	3.465E-05	9.404E-06	5.197E-05

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Paint Booth Operations**

**Company Name: Mobile Drilling Company dba Foremost Mobile  
Address City IN Zip: 3807 Madison Avenue, Indianapolis, IN 46227  
Permit Number: 097-25050-00621  
Pit ID: 097-00621  
Reviewer: Jason R. Krawczyk  
Date: May 5, 2009**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
<b>Scenario 1</b>																
FDGH 2830	8.50	38.68%	0.0%	38.7%	0.0%	61.00%	0.09380	2.00	3.29	3.29	0.62	14.80	2.70	0.64	5.39	85%
DelFleet F3260	9.21	14.55%	0.0%	14.6%	0.0%	85.58%	0.02340	2.00	1.34	1.34	0.06	1.51	0.27	0.24	1.57	85%
DelFleet F3405 Additive	8.14	99.16%	0.0%	99.2%	0.0%	0.84%	0.00440	2.00	8.07	8.07	0.07	1.70	0.31	0.00	960.91	85%
<b>Scenario 2</b>																
PPG Urotec AUE-300	8.30	29.52%	0.0%	29.5%	0.0%	70.28%	0.09380	2.00	2.45	2.45	0.46	11.03	2.01	0.72	3.49	85%
AUE-301 PPG	8.72	30.05%	0.0%	30.1%	0.0%	69.87%	0.02340	2.00	2.62	2.62	0.12	2.94	0.54	0.19	3.75	85%
UA-11 Urethane Accelerator PPG	8.15	98.32%	0.0%	98.3%	0.0%	1.68%	0.00440	2.00	8.01	8.01	0.07	1.69	0.31	0.00	476.97	85%
<b>Potential Emissions:</b>											<b>0.75</b>	<b>18.01</b>	<b>3.29</b>	<b>0.88</b>		

**Note:**  
Only one coating scenario can be operated at one time. Therefore the worst case scenario was used in determining PTE.

**Methodology:**  
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)  
Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)  
Total = Worst Coating + Sum of all solvents used

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Coating Prep and Bedliner Operations**

**Company Name: Mobile Drilling Company dba Foremost Mobile  
Address City IN Zip: 3807 Madison Avenue, Indianapolis, IN 46227  
Permit Number: 097-25050-00621  
Pit ID: 097-00621  
Reviewer: Jason R. Krawczyk  
Date: May 5, 2009**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Maximum Annual Usage (gal/yr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Lacquer Thinner #3	7.10	100.00%	0.0%	100.0%	0.0%	0.00%	135.00	7.10	7.10	0.11	2.63	0.48	0.00	N/A	85%
G + G Mineral Spirits	6.43	100.00%	0.0%	100.0%	0.0%	0.00%	84.00	6.43	6.43	0.06	1.48	0.27	0.00	N/A	85%
Herculiner	8.83	27.41%	0.0%	27.4%	0.0%	12.50%	91.00	2.42	2.42	0.03	0.60	0.11	0.01	19.36	85%
VAP-9XX	8.05	74.05%	0.0%	74.1%	0.0%	25.95%	232.00	5.96	5.96	0.16	3.79	0.69	0.04	22.97	85%
<b>Potential Emissions:</b>										<b>0.35</b>	<b>8.50</b>	<b>1.55</b>	<b>0.04</b>		

**Methodology:**

Potential VOC pounds per hour = Density (lb/gal) \* Weight % Volatile (H2O & Organics) \* Maximum Annual Usage (gal/yr) \* 1yr / 8760 hrs

Potential VOC pounds per day = Potential VOC pounds per hour \* 24 hrs / 1 day

Potential VOC tons per year = Potential VOC pounds per hour \* 8760 hrs / 1 yr \* 2000 lbs / 1 ton

Particulate Potential (tons/yr) = Density (Lb/gal) \* Volume % Non-Volatiles (solids) \* Maximum Annual Usage (gal/yr) \* (1 - Transfer Efficiency) \* 1 ton / 2000 lbs

**Appendix A: Emission Calculations**

**HAP Emission Calculations  
From Paint Booth Operations**

**Company Name:** Mobile Drilling Company dba Foremost Mobile  
**Address City IN Zip:** 3807 Madison Avenue, Indianapolis, IN 46227  
**Permit Number:** 097-25050-00621  
**Plt ID:** 097-00621  
**Reviewer:** Jason R. Krawczyk  
**Date:** May 5, 2009

Material	Density (Lb/Gal)	Gallons of Material (gal/yr)	Weight % Xylene	Weight % Toluene	Weight % Napthalene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Napthalene Emissions (ton/yr)
<b>Scenario 1</b>								
FDGH 2830	8.50	1642.50	0.55%	0.00%	3.00%	0.04	0.00	0.21
DelFleet F3260	9.21	410.63	0.00%	0.00%	0.00%	0.00	0.00	0.00
DelFleet F3405 Additive	8.14	76.99	0.00%	0.00%	0.00%	0.00	0.00	0.00
<b>Scenario 2</b>								
PPG Urotec AUE-300	8.30	1642.50	1.00%	5.00%	0.00%	0.07	0.34	0.00
AUE-301 PPG	8.72	410.63	0.00%	0.00%	0.00%	0.00	0.00	0.00
UA-11 Urethane Accelerator PP	8.15	76.99	0.00%	0.00%	0.00%	0.00	0.00	0.00
<b>Potential Emissions:</b>						<b>0.07</b>	<b>0.34</b>	<b>0.21</b>

**Worst Single HAP: 0.34 Toluene**  
**Combined HAPs: 0.62**

**Note:**  
 Only one coating sceniario can be operated at one time. Therefore the worst case scenario was used in determining PTE.

**Methodology:**  
 HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

**Appendix A: Emission Calculations**  
**HAP Emission Calculations**  
**From Coating Prep and Bedliner Operations**

**Company Name:** Mobile Drilling Company dba Foremost Mobile  
**Address City IN Zip:** 3807 Madison Avenue, Indianapolis, IN 46227  
**Permit Number:** 097-25050-00621  
**Pit ID:** 097-00621  
**Reviewer:** Jason R. Krawczyk  
**Date:** May 5, 2009

Material	Density (Lb/Gal)	Maximum Annual Usage (gal/yr)	Weight % Xylene	Weight % Toluene	Weight % Methanol	Weight % Ethyl Benzene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Methanol Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)
Lacquer Thinner #3	7.10	135.00	0.00%	75.00%	2.00%	0.00%	0.00	0.36	0.01	0.00
G + G Mineral Spirits	6.43	84.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
Herculiner	8.83	91.00	27.00%	0.00%	0.00%	0.00%	0.11	0.00	0.00	0.00
VAP-9XX	8.05	232.00	5.00%	1.00%	0.00%	1.00%	0.05	0.01	0.00	0.01
<b>Potential Emissions:</b>							<b>0.16</b>	<b>0.37</b>	<b>0.01</b>	<b>0.01</b>

**Worst Single HAP: 0.37 Toluene**  
**Combined HAPs: 0.54**

**Methodology:**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Maximum Annual Usage (gal/yr) \* Weight % HAP \* 1 ton/2000 lbs

**Appendix A: Emission Calculations  
Particulate emissions  
From Woodworking**

**Company Name:** Mobile Drilling Company dba Foremost Mobile  
**Address City IN Zip:** 3807 Madison Avenue, Indianapolis, IN 46227  
**Permit Number:** 097-25050-00621  
**Plt ID:** 097-00621  
**Reviewer:** Jason R. Krawczyk  
**Date:** May 5, 2009

**Woodworking**

Particulate Collected: 

0.58
------

 lbs/hr  
Control Efficiency: 

98.0%
-------

	Pollutant		
	PM	PM-10	PM-2.5
Uncontrolled Emissions (lbs/hr)	0.59	0.59	0.59
Uncontrolled Emissions (tons/year)	2.58	2.58	2.58
Controlled Emissions (lbs/hr)*	0.01	0.01	0.59
Controlled Emissions (tons/year)	0.05	0.05	2.58

**Notes:**

In October of 1993 a Final Order Granting Summary Judgment was signed by an Administrative Law Judge ("ALJ") resolving ; appeal of an IDEM permit related to the method by which IDEM calculated potential emissions from woodworking operations. his findings, the ALJ determined that particulate controls were necessary for the facility, and therefore, potential emissions we to be calculated after controls. Based on this ruling, potential emissions for particulate matter were calculated after considerat of the controls.

**Methodology:**

Uncontrolled emissions = (amount collected \* (8760/2000)) / (control efficiency)  
Controlled emissions = (uncontrolled emissions) \* (1 - control efficiency)  
Allowable Emissions = 4.10(Process Weight Rate)^0.67

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

**Company Name: Mobile Drilling Company dba Foremost Mobile**  
**Address City IN Zip: 3807 Madison Avenue, Indianapolis, IN 46227**  
**Permit Number: 097-25050-00621**  
**Pit ID: 097-00621**  
**Reviewer: Jason R. Krawczyk**  
**Date: May 5, 2009**

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	Electrode Consumption	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Metal Inert Gas (MIG) Welding (Lincoln OS71M)	6	0.14	0.82	0.0122	0.000662	0.000004	0.000002	0.010	0.001	0.000	1.644E-06	0.001
Metal Inert Gas (MIG) Welding (Lincoln Lincore 55)	3	0.09	0.27	0.0570	0.00202	0.000112	0.00097	0.016	0.001	0.000	0.0002658	0.001
<b>EMISSION TOTALS</b>												
Potential Emissions lbs/hr								0.03				0.00
Potential Emissions lbs/day								0.62				0.03
Potential Emissions tons/year								0.11				0.01

**METHODOLOGY**

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

**Appendix A: Emission Calculations  
VOC Emissions  
From Parts Washers**

**Company Name: Mobile Drilling Company dba Foremost Mobile  
Address City IN Zip: 3807 Madison Avenue, Indianapolis, IN 46227  
Permit Number: 097-25050-00621  
Plt ID: 097-00621  
Reviewer: Jason R. Krawczyk  
Date: May 5, 2009**

**(2) Parts Washers**

Material	Process	Density (lb/gal)	Annual Usage (gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non Volatiles (Solids)	Gal of Mat (gal/day)	Potential VOC (lb/hr)	Potential VOC (lb/day)	Potential VOC (tons/yr)
Safety Clean	Degreaser	6.63	1275	100.00%	0.00%	100.00%	0.00%	0.00%	3.49	0.97	23.16	4.23
<b>Total:</b>										<b>0.97</b>	<b>23.16</b>	<b>4.23</b>

**Note:**

Product Density (lb/gal) = Specific Gravity x 8.34 lb/gal = 0.795 x 8.34

Annual Usage (gal) = typical solvent usage (1,020 gal/yr) \* 125% safety factor

**Methodology:**