

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence Governor Thomas W. Easterly

Commissioner

TO: Interested Parties / Applicant

DATE: October 29, 2013

RE: Mid America Foundation Supply, Inc. dba MAFCO and Poseidon Barge /

001-33426-00066

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);
- 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
- 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.dot 6/13/2013







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October 29, 2013

Dale Bullion, Quality Manager
Mid America Foundation Supply, Inc. d/b/a MAFCO and Poseidon Barge
3101 New Haven Avenue
Fort Wayne, IN 46803

Re: Exempt Construction and Operation Status, E001-33426-00066

Dear Mr. Bullion:

The application from Mid America Foundation Supply, Inc. d/b/a MAFCO and Poseidon Barge received on July 12, 2012 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 barge manufacturing source located at 750 East Parr Road, Berne, IN 46711 is classified as exempt from air pollution permit requirements:

- (a) One (1) paint booth, identified as emission unit PB1, constructed in 2013, using an airless spray application method, with a maximum capacity to surface coat 0.1 fabricated metal units per hour using 6.25 gallons of coating per unit, using dry filters for overspray control and exhausting into the plant.
- (b) One (1) MIG welding process consisting of twelve (12) welding units, identified as emissions unit W1-W12, constructed in 2012, with a maximum electrode consumption rate of 0.2 lbs/hr using no control and exhausting into the plant.
 - Under 40 CFR 63, Subpart XXXXXX (6X), the welding process is considered an affected facility.
- (c) One (1) abrasive blasting unit, identified as AB1, constructed in 2012, with a flow rate of 1,000 pounds of structural steel per hour and 20 pounds of grit for a total flow rate of 1,020 pounds per hour, using no control and exhausting into the plant.
- (d) Natural gas combustion of .205 MMBtu per hour.
- (e) Paved roads.

The following conditions shall be applicable:

- (1) 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 forty percent (40%) 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,



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Berne, Indiana

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Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

- (2) 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.
- (3) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
 The paint booth, identified as PB1, does not use roll, flow or brush coating and has the potential to use more than five gallons of paint per day; therefore, 326 IAC 6-3-2 applies.

Pursuant to 326 IAC 6-3-2(d), particulate from the one (1) paint booth, identified as PB1, shall be controlled by a dry particulate filters, and the source shall operate the control device in accordance with manufacturer's specifications.

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

- (1) Repair the control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Registrant 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 visible detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

(4) Pursuant to 326 IAC 8-2-9(d)(4), the volatile organic compound (VOC) content of the coating utilized in the paint booth, shall be limited to three and five tenths (3.5) pounds of VOCs per gallon of coating less water, for air dried or forced warm air dried coatings.

Pursuant to 326 IAC 8-2-9(f), work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not limited to, the following:

- (a) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
- (b) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.
- (c) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.
- (d) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
- (e) Minimize VOC emissions from the cleaning application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

- (5) Pursuant to 40 CFR 63, the source shall comply with the provisions of 40 CFR Part 63, Subpart A General Provisions, which are incorporated by reference as 326 IAC 20-1, except as otherwise specified in 40 CFR 63, Subpart XXXXXX.
- (6) The MIG welding process This source is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63, Subpart XXXXXX (63.11514 through 63.11523), because this source is an area source and engages in the operation of one of the nine source categories listed in 40 CFR 63.11522. See Attachment A for the text of the NESHAP.

Applicable portions of the NESHAP are the following:

- (1) 40 CFR 63.11514(a),(b)
- (2) 40 CFR 63.11515(a)
- (3) 40 CFR 63.11516(f)
- (4) 40 CFR 63.11517
- (5) 40 CFR 63.11519
- (0) 40 OFR 00.11518
- (6) 40 CFR 63.11521
- (7) 40 CFR 63.11522
- (8) Table 1
- (9) Table 2

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/ai/appfiles/idem-caats/.

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 Deborah Cole, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, at 317-234-5377 or at 1-800-451-6027 (ext. 4-5377).

Sincerely,

Iryn Calilung, Section Chief

Permits Branch
Office of Air Quality

Attachments: Attachment A IC/dac

cc: File - Adams County

Adams County Health Department Compliance and Enforcement Branch

Indiana Department of Environmental Management Office of Air Quality

Attachment A

National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories - Subpart XXXXXX

> for Mid America Foundation Supply, Inc. d/b/a MAFCO and Poseidon Barge

Attachment A 40 CFR 63, Subpart XXXXXX

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Permit Reviewer: Deborah Cole

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)

Subpart XXXXXX—National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

Source: 73 FR 43000, July 23, 2008, unless otherwise noted.

Applicability and Compliance Dates

§ 63.11514 Am I subject to this subpart?

- (a) You are subject to this subpart if you own or operate an area source that is primarily engaged in the operations in one of the nine source categories listed in paragraphs (a)(1) through (9) of this section. Descriptions of these source categories are shown in Table 1 of this subpart. "Primarily engaged" is defined in §63.11522, "What definitions apply to this subpart?"
- (1) Electrical and Electronic Equipment Finishing Operations;
- (2) Fabricated Metal Products;
- (3) Fabricated Plate Work (Boiler Shops);
- (4) Fabricated Structural Metal Manufacturing;
- (5) Heating Equipment, except Electric;
- (6) Industrial Machinery and Equipment Finishing Operations;
- (7) Iron and Steel Forging;
- (8) Primary Metal Products Manufacturing; and
- (9) Valves and Pipe Fittings.
- (b) The provisions of this subpart apply to each new and existing affected source listed and defined in paragraphs (b)(1) through (5) of this section if you use materials that contain or have the potential to emit metal fabrication or finishing metal HAP (MFHAP), defined to be the compounds of cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form with the exception of lead. Materials that contain MFHAP are defined to be materials that contain greater than 0.1 percent for carcinogens, as defined by OSHA at 29 CFR 1910.1200(d)(4), and greater than 1.0 percent for noncarcinogens. For the MFHAP, this corresponds to materials that contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (of the metal), and materials that contain manganese in amounts greater than or equal to 1.0 percent by weight (of the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material.
- (1) A dry abrasive blasting affected source is the collection of all equipment and activities necessary to perform dry abrasive blasting operations which use materials that contain MFHAP or that have the potential to emit MFHAP.
- (2) A machining affected source is the collection of all equipment and activities necessary to perform machining operations which use materials that contain MFHAP, as defined in §63.11522, "What definitions apply to this subpart?", or that have the potential to emit MFHAP.
- (3) A dry grinding and dry polishing with machines affected source is the collection of all equipment and activities necessary to perform dry grinding and dry polishing with machines operations which use materials that contain MFHAP, as defined in §63.11522, "What definitions apply to this subpart?", or have the potential to emit MFHAP.
- (4) A spray painting affected source is the collection of all equipment and activities necessary to perform spray-applied painting operations using paints which contain MFHAP. A spray painting affected source includes all equipment used to apply cleaning materials to a substrate to prepare it for paint application (surface preparation) or to remove dried paint; to apply a paint to a substrate (paint application) and to dry or cure the paint after application; or to clean paint operation equipment (equipment cleaning). Affected source(s) subject to the requirements of this paragraph are not subject to the miscellaneous surface coating provisions of subpart HHHHHHH of this part, "National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources."

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(5) A welding affected source is the collection of all equipment and activities necessary to perform welding operations which use materials that contain MFHAP, as defined in §63.11522, "What definitions apply to this subpart?", or have the potential to emit MFHAP.

- (c) An affected source is existing if you commenced construction or reconstruction of the affected source, as defined in §63.2, "General Provisions" to part 63, before April 3, 2008.
- (d) An affected source is new if you commenced construction or reconstruction of the affected source, as defined in §63.2, "General Provisions" to part 63, on or after April 3, 2008.
- (e) This subpart does not apply to research or laboratory facilities, as defined in section 112(c)(7) of the Clean Air Act (CAA).
- (f) This subpart does not apply to tool or equipment repair operations, facility maintenance, or quality control activities as defined in §63.11522, "What definitions apply to this subpart?"
- (g) This subpart does not apply to operations performed on site at installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the National Guard of any such state), the National Aeronautics and Space Administration, or the National Nuclear Security Administration.
- (h) This subpart does not apply to operations that produce military munitions, as defined in §63.11522, "What definitions apply to this subpart?", manufactured by or for the Armed Forces of the United States (including the Coast Guard and the National Guard of any such state), or equipment directly and exclusively used for the purposes of transporting military munitions.
- (i) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.

§ 63.11515 What are my compliance dates?

- (a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions in this subpart by July 25, 2011.
- (b) If you own or operate a new affected source, you must achieve compliance with the applicable provisions in this subpart by July 23, 2008, or upon startup of your affected source, whichever is later.

Standards and Compliance Requirements

§ 63.11516 What are my standards and management practices?

- (a) Dry abrasive blasting standards. If you own or operate a new or existing dry abrasive blasting affected source, you must comply with the requirements in paragraphs (a)(1) through (3) of this section, as applicable, for each dry abrasive blasting operation that uses materials that contain MFHAP, as defined in §63.11522, "What definitions apply to this subpart?", or has the potential to emit MFHAP. These requirements do not apply when abrasive blasting operations are being performed that do not use any materials containing MFHAP or do not have the potential to emit MFHAP.
- (1) Standards for dry abrasive blasting of objects performed in totally enclosed and unvented blast chambers. If you own or operate a new or existing dry abrasive blasting affected source which consists of an abrasive blasting chamber that is totally enclosed and unvented, as defined in §63.11522, "What definitions apply to this subpart?", you must implement management practices to minimize emissions of MFHAP. These management practices are the practices specified in paragraph (a)(1)(i) and (ii) of this section.
- (i) You must minimize dust generation during emptying of abrasive blasting enclosures; and
- (ii) You must operate all equipment associated with dry abrasive blasting operations according to the manufacturer's instructions.
- (2) Standards for dry abrasive blasting of objects performed in vented enclosures. If you own or operate a new or existing dry abrasive blasting affected source which consists of a dry abrasive blasting operation which has a vent allowing any air or blast material to escape, you must comply with the requirements in paragraphs (a)(2)(i) and (ii) of this section. Dry abrasive blasting operations for which the items to be blasted exceed 8 feet (2.4 meters) in any dimension, may be performed subject to the requirements in paragraph (a)(3) of this section.
- (i) You must capture emissions and vent them to a filtration control device. You must operate the filtration control device according to manufacturer's instructions, and you must demonstrate compliance with this requirement by maintaining a record of the manufacturer's specifications for the filtration control devices, as specified by the requirements in §63.11519(c)(4), "What are my notification, recordkeeping, and reporting requirements?"

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- (ii) You must implement the management practices to minimize emissions of MFHAP as specified in paragraphs (a)(2)(ii)(A) through (C) of this section.
- (A) You must take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable; and
- (B) You must enclose dusty abrasive material storage areas and holding bins, seal chutes and conveyors that transport abrasive materials;
- (C) You must operate all equipment associated with dry abrasive blasting operations according to manufacturer's instructions.
- (3) Standards for dry abrasive blasting of objects greater than 8 feet (2.4 meters) in any one dimension. If you own or operate a new or existing dry abrasive blasting affected source which consists of a dry abrasive blasting operation which is performed on objects greater than 8 feet (2.4 meters) in any one dimension, you may implement management practices to minimize emissions of MFHAP as specified in paragraph (a)(3)(i) of this section instead of the practices required by paragraph (a)(2) of this section. You must demonstrate that management practices are being implemented by complying with the requirements in paragraphs (a)(3)(ii) through (iv) of this section.
- (i) Management practices for dry abrasive blasting of objects greater than 8 feet (2.4 meters) in any one dimension are specified in paragraphs (a)(3)(i)(A) through (E) of this section.
- (A) You must take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable; and
- (B) You must enclose abrasive material storage areas and holding bins, seal chutes and conveyors that transport abrasive material; and
- (C) You must operate all equipment associated with dry abrasive blasting operations according to manufacturer's instructions; and
- (D) You must not re-use dry abrasive blasting media unless contaminants (i.e., any material other than the base metal, such as paint residue) have been removed by filtration or screening, and the abrasive material conforms to its original size; and
- (E) Whenever practicable, you must switch from high particulate matter (PM)-emitting blast media (e.g., sand) to low PM-emitting blast media (e.g., crushed glass, specular hematite, steel shot, aluminum oxide), where PM is a surrogate for MFHAP.
- (ii) You must perform visual determinations of fugitive emissions, as specified in §63.11517(b), "What are my monitoring requirements?", according to paragraphs (a)(3)(ii)(A) or (B) of this section, as applicable.
- (A) For abrasive blasting of objects greater than 8 feet (2.4 meters) in any one dimension that is performed outdoors, you must perform visual determinations of fugitive emissions at the fenceline or property border nearest to the outdoor dry abrasive blasting operation.
- (B) For abrasive blasting of objects greater than 8 feet (2.4 meters) in any one dimension that is performed indoors, you must perform visual determinations of fugitive emissions at the primary vent, stack, exit, or opening from the building containing the abrasive blasting operations.
- (iii) You must keep a record of all visual determinations of fugitive emissions along with any corrective action taken in accordance with the requirements in §63.11519(c)(2), "What are my notification, recordkeeping, and reporting requirements?"
- (iv) If visible fugitive emissions are detected, you must perform corrective actions until the visible fugitive emissions are eliminated, at which time you must comply with the requirements in paragraphs (a)(3)(iv)(A) and (B) of this section.
- (A) You must perform a follow-up inspection for visible fugitive emissions in accordance with §63.11517(a), "Monitoring Requirements."
- (B) You must report all instances where visible emissions are detected, along with any corrective action taken and the results of subsequent follow-up inspections for visible emissions, with your annual certification and compliance report as required by §63.11519(b)(5), "Notification, recordkeeping, and reporting requirements."
- (b) Standards for machining. If you own or operate a new or existing machining affected source, you must implement management practices to minimize emissions of MFHAP as specified in paragraph (b)(1) and (2) of this section for each machining operation that uses materials that contain MFHAP, as defined in §63.11522, "What definitions apply to this subpart?", or has the potential to emit MFHAP. These requirements do not apply when machining operations are being performed that do not use any materials containing MFHAP and do not have the potential to emit MFHAP.
- (1) You must take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable; and
- (2) You must operate all equipment associated with machining according to manufacturer's instructions.

Mid America Foundation Supply, Inc. d/b/a MAFCO and Poseidon Barge Berne, Indiana Permit Reviewer: Deborah Cole

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(c) Standards for dry grinding and dry polishing with machines. If you own or operate a new or existing dry grinding and dry polishing with machines affected source, you must comply with the requirements of paragraphs (c)(1) and (2) of this section for each dry grinding and dry polishing with machines operation that uses materials that contain MFHAP, as defined in §63.11522, "What definitions apply to this subpart?", or has the potential to emit MFHAP. These requirements do not apply when dry grinding and dry polishing operations are being performed that do not use any materials containing MFHAP and do not have the potential to emit MFHAP.

- (1) You must capture emissions and vent them to a filtration control device. You must demonstrate compliance with this requirement by maintaining a record of the manufacturer's specifications for the filtration control devices, as specified by the requirements in §63.11519(c)(4), "Notification, recordkeeping, and reporting Requirements."
- (2) You must implement management practices to minimize emissions of MFHAP as specified in paragraphs (c)(2)(i) and (ii) of this section.
- (i) You must take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable;
- (ii) You must operate all equipment associated with the operation of dry grinding and dry polishing with machines, including the filtration control device, according to manufacturer's instructions.
- (d) Standards for control of MFHAP in spray painting. If you own or operate a new or existing spray painting affected source, as defined in §63.11514 (b)(4), "Am I subject to this subpart?," you must implement the management practices in paragraphs (d)(1) through (9) of this section when a spray-applied paint that contains MFHAP is being applied. These requirements do not apply when spray-applied paints that do not contain MFHAP are being applied.
- (1) Standards for spray painting for MFHAP control. All spray-applied painting of objects must meet the requirements of paragraphs (d)(1)(i) through (iii) of this section. These requirements do not apply to affected sources located at Fabricated Structural Metal Manufacturing facilities, as described in Table 1, "Description of Source Categories Affected by this Subpart," or affected sources that spray paint objects greater than 15 feet (4.57 meters), that are not spray painted in spray booths or spray rooms.
- (i) Spray booths or spray rooms must have a full roof, at least two complete walls, and one or two complete side curtains or other barrier material so that all four sides are covered. The spray booths or spray rooms must be ventilated so that air is drawn into the booth and leaves only though the filter. The roof may contain narrow slots for connecting fabricated products to overhead cranes, and/or for cords or cables.
- (ii) All spray booths or spray rooms must be fitted with a type of filter technology that is demonstrated to achieve at least 98 percent capture of MFHAP. The procedure used to demonstrate filter efficiency must be consistent with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Method 52.1, "Gravimetric and Dust-Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter, June 4, 1992" (incorporated by reference, see §63.14). The test coating for measuring filter efficiency shall be a high-solids bake enamel delivered at a rate of at least 135 grams per minute from a conventional (non-High Volume Low Pressure) air-atomized spray gun operating at 40 psi air pressure; the air flow rate across the filter shall be 150 feet per minute. Owners and operators may use published filter efficiency data provided by filter vendors to demonstrate compliance with this requirement and are not required to perform this measurement.
- (iii) You must perform regular inspection and replacement of the filters in all spray booths or spray rooms according to manufacturer's instructions, and maintain documentation of these activities, as detailed in §63.11519(c)(5), "Notification, recordkeeping, and reporting requirements."
- (iv) As an alternative compliance requirement, spray booths or spray rooms equipped with a water curtain, called "waterwash" or "waterspray" booths or spray rooms that are operated and maintained according to the manufacturer's specifications and that achieve at least 98 percent control of MFHAP, may be used in lieu of the spray booths or spray rooms requirements of paragraphs (d)(1)(i) through (iii) of this section.
- (2) Standards for spray painting application equipment of all objects painted for MFHAP control. All paints applied via spray-applied painting must be applied with a high-volume, low-pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology that is demonstrated to achieve transfer efficiency comparable to one of these spray gun technologies for a comparable operation, and for which written approval has been obtained from the Administrator. The procedure used to demonstrate that spray gun transfer efficiency is equivalent to that of an HVLP spray gun must be equivalent to the California South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989" and "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002", Revision 0 (incorporated by reference, see §63.14).
- (3) Spray system recordkeeping. You must maintain documentation of the HVLP or other high transfer efficiency spray paint delivery methods, as detailed in §63.11519(c)(7), "Notification, recordkeeping, and reporting requirements."
- (4) Spray gun cleaning. All cleaning of paint spray guns must be done with either non-HAP gun cleaning solvents, or in such a manner that an atomized mist of spray of gun cleaning solvent and paint residue is not created outside of a container that collects the used gun cleaning solvent. Spray gun cleaning may be done with, for example, by hand cleaning of parts of the disassembled gun in a container of solvent, by flushing solvent through the gun without atomizing the solvent and paint residue, or by using a fully enclosed spray gun washer. A combination of these non-atomizing methods may also be used.

Mid America Foundation Supply, Inc. d/b/a MAFCO and Poseidon Barge Berne, Indiana

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(5) Spray painting worker certification. All workers performing painting must be certified that they have completed training in the proper spray application of paints and the proper setup and maintenance of spray equipment. The minimum requirements for training and certification are described in paragraph (d)(6) of this section. The spray application of paint is prohibited by persons who are not certified as having completed the training described in paragraph (d)(6) of this section. The requirements of this paragraph do not apply to the students of an accredited painting training program who are under the direct supervision of an instructor who meets the requirements of this paragraph. The requirements of this paragraph do not apply to operators of robotic or automated painting operations.

- (6) Spray painting training program content. Each owner or operator of an affected spray painting affected source must ensure and certify that all new and existing personnel, including contract personnel, who spray apply paints are trained in the proper application of paints as required by paragraph (d)(5) of this section. The training program must include, at a minimum, the items listed in paragraphs (d)(6)(i) through (iii) of this section.
- (i) A list of all current personnel by name and job description who are required to be trained;
- (ii) Hands-on, or in-house or external classroom instruction that addresses, at a minimum, initial and refresher training in the topics listed in paragraphs (d)(6)(ii)(A) through (D) of this section.
- (A) Spray gun equipment selection, set up, and operation, including measuring paint viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate.
- (B) Spray technique for different types of paints to improve transfer efficiency and minimize paint usage and overspray, including maintaining the correct spray gun distance and angle to the part, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke.
- (C) Routine spray booth and filter maintenance, including filter selection and installation.
- (D) Environmental compliance with the requirements of this subpart.
- (iii) A description of the methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of the required training. Alternatively, owners and operators who can show by documentation or certification that a painter's work experience and/or training has resulted in training equivalent to the training required in paragraph (d)(6)(ii) of this section are not required to provide the initial training required by that paragraph to these painters.
- (7) Records of spray painting training. You must maintain records of employee training certification for use of HVLP or other high transfer efficiency spray paint delivery methods as detailed in §63.11519(c)(8), "Notification, recordkeeping, and reporting requirements."
- (8) Spray painting training dates. As required by paragraph (d)(5) of this section, all new and existing personnel at an affected spray painting affected source, including contract personnel, who spray apply paints must be trained by the dates specified in paragraphs (d)(8)(i) and (ii) of this section.
- (i) If your source is a new source, all personnel must be trained and certified no later than January 20, 2009, 180 days after startup, or 180 days after hiring, whichever is later. Training that was completed within 5 years prior to the date training is required, and that meets the requirements specified in paragraph (d)(6)(ii) of this section satisfies this requirement and is valid for a period not to exceed 5 years after the date the training is completed.
- (ii) If your source is an existing source, all personnel must be trained and certified no later than July 25, 2011, or 180 days after hiring, whichever is later. Worker training that was completed within 5 years prior to the date training is required, and that meets the requirements specified in paragraph (d)(6)(ii) of this section, satisfies this requirement and is valid for a period not to exceed 5 years after the date the training is completed.
- (9) Duration of training validity. Training and certification will be valid for a period not to exceed 5 years after the date the training is completed. All personnel must receive refresher training that meets the requirements of this section and be re-certified every 5 years.
- (e) [Reserved]
- (f) Standards for welding. If you own or operate a new or existing welding affected source, you must comply with the requirements in paragraphs (f)(1) and (2) of this section for each welding operation that uses materials that contain MFHAP, as defined in §63.11522, "What definitions apply to this subpart?", or has the potential to emit MFHAP. If your welding affected source uses 2,000 pounds or more per year of welding rod containing one or more MFHAP (calculated on a rolling 12-month basis), you must demonstrate that management practices or fume control measures are being implemented by complying with the requirements in paragraphs (f)(3) through (8) of this section. The requirements in paragraphs (f)(1) through (8) of this section do not apply when welding operations are being performed that do not use any materials containing MFHAP or do not have the potential to emit MFHAP.

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(1) You must operate all equipment, capture, and control devices associated with welding operations according to manufacturer's instructions. You must demonstrate compliance with this requirement by maintaining a record of the manufacturer's specifications for the capture and control devices, as specified by the requirements in §63.11519(c)(4), "Notification, recordkeeping, and reporting requirements."

- (2) You must implement one or more of the management practices specified in paragraphs (f)(2)(i) through (v) of this section to minimize emissions of MFHAP, as practicable, while maintaining the required welding quality through the application of sound engineering judgment.
- (i) Use welding processes with reduced fume generation capabilities (e.g., gas metal arc welding (GMAW)—also called metal inert gas welding (MIG));
- (ii) Use welding process variations (e.g., pulsed current GMAW), which can reduce fume generation rates;
- (iii) Use welding filler metals, shielding gases, carrier gases, or other process materials which are capable of reduced welding fume generation;
- (iv) Optimize welding process variables (e.g., electrode diameter, voltage, amperage, welding angle, shield gas flow rate, travel speed) to reduce the amount of welding fume generated; and
- (v) Use a welding fume capture and control system, operated according to the manufacturer's specifications.
- (3) Tier 1 compliance requirements for welding. You must perform visual determinations of welding fugitive emissions as specified in §63.11517(b), "Monitoring requirements," at the primary vent, stack, exit, or opening from the building containing the welding operations. You must keep a record of all visual determinations of fugitive emissions along with any corrective action taken in accordance with the requirements in §63.11519(c)(2), "Notification, recordkeeping, and reporting requirements."
- (4) Requirements upon initial detection of visible emissions from welding. If visible fugitive emissions are detected during any visual determination required in paragraph (f)(3) of this section, you must comply with the requirements in paragraphs (f)(4)(i) and (ii) of this section.
- (i) Perform corrective actions that include, but are not limited to, inspection of welding fume sources, and evaluation of the proper operation and effectiveness of the management practices or fume control measures implemented in accordance with paragraph (f)(2) of this section. After completing such corrective actions, you must perform a follow-up inspection for visible fugitive emissions in accordance with §63.11517(a), "Monitoring Requirements," at the primary vent, stack, exit, or opening from the building containing the welding operations.
- (ii) Report all instances where visible emissions are detected, along with any corrective action taken and the results of subsequent follow-up inspections for visible emissions, and submit with your annual certification and compliance report as required by §63.11519(b)(5), "Notification, recordkeeping, and reporting requirements."
- (5) Tier 2 requirements upon subsequent detection of visible emissions. If visible fugitive emissions are detected more than once during any consecutive 12 month period (notwithstanding the results of any follow-up inspections), you must comply with paragraphs (f)(5)(i) through (iv) of this section.
- (i) Within 24 hours of the end of the visual determination of fugitive emissions in which visible fugitive emissions were detected, you must conduct a visual determination of emissions opacity, as specified in §63.11517(c), "Monitoring requirements," at the primary vent, stack, exit, or opening from the building containing the welding operations.
- (ii) In lieu of the requirement of paragraph (f)(3) of this section to perform visual determinations of fugitive emissions with EPA Method 22, you must perform visual determinations of emissions opacity in accordance with §63.11517(d), "Monitoring Requirements," using EPA Method 9, at the primary vent, stack, exit, or opening from the building containing the welding operations.
- (iii) You must keep a record of each visual determination of emissions opacity performed in accordance with paragraphs (f)(5)(i) or (ii) of this section, along with any subsequent corrective action taken, in accordance with the requirements in §63.11519(c)(3), "Notification, recordkeeping, and reporting requirements."
- (iv) You must report the results of all visual determinations of emissions opacity performed in accordance with paragraphs (f)(5)(i) or (ii) of this section, along with any subsequent corrective action taken, and submit with your annual certification and compliance report as required by §63.11519(b)(6), "Notification, recordkeeping, and reporting requirements."
- (6) Requirements for opacities less than or equal to 20 percent but greater than zero. For each visual determination of emissions opacity performed in accordance with paragraph (f)(5) of this section for which the average of the six-minute average opacities recorded is 20 percent or less but greater than zero, you must perform corrective actions, including inspection of all welding fume sources, and evaluation of the proper operation and effectiveness of the management practices or fume control measures implemented in accordance with paragraph (f)(2) of this section.

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(7) Tier 3 requirements for opacities exceeding 20 percent. For each visual determination of emissions opacity performed in accordance with paragraph (f)(5) of this section for which the average of the six-minute average opacities recorded exceeds 20 percent, you must comply with the requirements in paragraphs (f)(7)(i) through (v) of this section.

- (i) You must submit a report of exceedence of 20 percent opacity, along with your annual certification and compliance report, as specified in §63.11519(b)(8), "Notification, recordkeeping, and reporting requirements," and according to the requirements of §63.11519(b)(1), "Notification, recordkeeping, and reporting requirements."
- (ii) Within 30 days of the opacity exceedence, you must prepare and implement a Site-Specific Welding Emissions Management Plan, as specified in paragraph (f)(8) of this section. If you have already prepared a Site-Specific Welding Emissions Management Plan in accordance with this paragraph, you must prepare and implement a revised Site-Specific Welding Emissions Management Plan within 30 days.
- (iii) During the preparation (or revision) of the Site-Specific Welding Emissions Management Plan, you must continue to perform visual determinations of emissions opacity, beginning on a daily schedule as specified in §63.11517(d), "Monitoring Requirements," using EPA Method 9, at the primary vent, stack, exit, or opening from the building containing the welding operations.
- (iv) You must maintain records of daily visual determinations of emissions opacity performed in accordance with paragraph (f)(7)(iii) of this section, during preparation of the Site-Specific Welding Emissions Management Plan, in accordance with the requirements in §63.11519(b)(9), "Notification, recordkeeping, and reporting requirements."
- (v) You must include these records in your annual certification and compliance report, according to the requirements of §63.11519(b)(1), "Notification, recordkeeping, and reporting requirements."
- (8) Site-Specific Welding Emissions Management Plan. The Site-Specific Welding Emissions Management Plan must comply with the requirements in paragraphs (f)(8)(i) through (iii) of this section.
- (i) Site-Specific Welding Emissions Management Plan must contain the information in paragraphs (f)(8)(i)(A) through (F) of this section.
- (A) Company name and address;
- (B) A list and description of all welding operations which currently comprise the welding affected source;
- (C) A description of all management practices and/or fume control methods in place at the time of the opacity exceedence;
- (D) A list and description of all management practices and/or fume control methods currently employed for the welding affected source;
- (E) A description of additional management practices and/or fume control methods to be implemented pursuant to paragraph (f)(7)(ii) of this section, and the projected date of implementation; and
- (F) Any revisions to a Site-Specific Welding Emissions Management Plan must contain copies of all previous plan entries, pursuant to paragraphs (f)(8)(i)(D) and (E) of this section.
- (ii) The Site-Specific Welding Emissions Management Plan must be updated annually to contain current information, as required by paragraphs (f)(8)(i)(A) through (C) of this section, and submitted with your annual certification and compliance report, according to the requirements of §63.11519(b)(1), "Notification, recordkeeping, and reporting requirements."
- (iii) You must maintain a copy of the current Site-Specific Welding Emissions Management Plan in your records in a readily-accessible location for inspector review, in accordance with the requirements in §63.11519(c)(12), "Notification, recordkeeping, and reporting requirements."

§ 63.11517 What are my monitoring requirements?

- (a) Visual determination of fugitive emissions, general. Visual determination of fugitive emissions must be performed according to the procedures of EPA Method 22, of 40 CFR part 60, Appendix A–7. You must conduct the EPA Method 22 test while the affected source is operating under normal conditions. The duration of each EPA Method 22 test must be at least 15 minutes, and visible emissions will be considered to be present if they are detected for more than six minutes of the fifteen minute period.
- (b) Visual determination of fugitive emissions, graduated schedule. Visual determinations of fugitive emissions must be performed in accordance with paragraph (a) of this section and according to the schedule in paragraphs (b)(1) through (4) of this section.
- (1) Daily Method 22 Testing. Perform visual determination of fugitive emissions once per day, on each day the process is in operation, during operation of the process.

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(2) Weekly Method 22 Testing. If no visible fugitive emissions are detected in consecutive daily EPA Method 22 tests, performed in accordance with paragraph (b)(1) of this section for 10 days of work day operation of the process, you may decrease the frequency of EPA Method 22 testing to once every five days of operation of the process (one calendar week). If visible fugitive emissions are detected during these tests, you must resume EPA Method 22 testing of that operation once per day during each day that the process is in operation, in accordance with paragraph (b)(1) of this section.

- (3) Monthly Method 22 Testing. If no visible fugitive emissions are detected in four consecutive weekly EPA Method 22 tests performed in accordance with paragraph (b)(2) of this section, you may decrease the frequency of EPA Method 22 testing to once per 21 days of operation of the process (one calendar month). If visible fugitive emissions are detected during these tests, you must resume weekly EPA Method 22 in accordance with paragraph (b)(2) of this section.
- (4) Quarterly Method 22 Testing. If no visible fugitive emissions are detected in three consecutive monthly EPA Method 22 tests performed in accordance with paragraph (b)(3) of this section, you may decrease the frequency of EPA Method 22 testing to once per 60 days of operation of the process (3 calendar months). If visible fugitive emissions are detected during these tests, you must resume monthly EPA Method 22 in accordance with paragraph (b)(3) of this section.
- (c) Visual determination of emissions opacity for welding Tier 2 or 3, general. Visual determination of emissions opacity must be performed in accordance with the procedures of EPA Method 9, of 40 CFR part 60, Appendix A–4, and while the affected source is operating under normal conditions. The duration of the EPA Method 9 test shall be thirty minutes.
- (d) Visual determination of emissions opacity for welding Tier 2 or 3, graduated schedule. You must perform visual determination of emissions opacity in accordance with paragraph (c) of this section and according to the schedule in paragraphs (d)(1) through (5) of this section.
- (1) Daily Method 9 testing for welding, Tier 2 or 3. Perform visual determination of emissions opacity once per day during each day that the process is in operation.
- (2) Weekly Method 9 testing for welding, Tier 2 or 3. If the average of the six minute opacities recorded during any of the daily consecutive EPA Method 9 tests performed in accordance with paragraph (d)(1) of this section does not exceed 20 percent for 10 days of operation of the process, you may decrease the frequency of EPA Method 9 testing to once per five days of consecutive work day operation. If opacity greater than 20 percent is detected during any of these tests, you must resume testing every day of operation of the process according to the requirements of paragraph (d)(1) of this section.
- (3) Monthly Method 9 testing for welding Tier 2 or 3. If the average of the six minute opacities recorded during any of the consecutive weekly EPA Method 9 tests performed in accordance with paragraph (d)(2) of this section does not exceed 20 percent for four consecutive weekly tests, you may decrease the frequency of EPA Method 9 testing to once per every 21 days of operation of the process. If visible emissions opacity greater than 20 percent is detected during any monthly test, you must resume testing every five days of operation of the process according to the requirements of paragraph (d)(2) of this section.
- (4) Quarterly Method 9 testing for welding Tier 2 or 3. If the average of the six minute opacities recorded during any of the consecutive weekly EPA Method 9 tests performed in accordance with paragraph (d)(3) of this section does not exceed 20 percent for three consecutive monthly tests, you may decrease the frequency of EPA Method 9 testing to once per every 120 days of operation of the process. If visible emissions opacity greater than 20 percent is detected during any quarterly test, you must resume testing every 21 days (month) of operation of the process according to the requirements of paragraph (d)(3) of this section.
- (5) Return to Method 22 testing for welding, Tier 2 or 3. If, after two consecutive months of testing, the average of the six minute opacities recorded during any of the monthly EPA Method 9 tests performed in accordance with paragraph (d)(3) of this section does not exceed 20 percent, you may resume EPA Method 22 testing as in paragraphs (b)(3) and (4) of this section. In lieu of this, you may elect to continue performing EPA Method 9 tests in accordance with paragraphs (d)(3)and (4) of this section.

§ 63.11518 [Reserved]

§ 63.11519 What are my notification, recordkeeping, and reporting requirements?

- (a) What notifications must I submit?—(1) Initial notification. If you are the owner or operator of an area source in one of the nine metal fabrication and finishing source categories, as defined in §63.11514 "Am I subject to this subpart?," you must submit the Initial Notification required by §63.9(b) "General Provisions," for a new affected source no later than 120 days after initial startup or November 20, 2008, whichever is later. For an existing affected source, you must submit the Initial Notification no later than July 25, 2011. Your Initial Notification must provide the information specified in paragraphs (a)(1)(i) through (iv) of this section.
- (i) The name, address, phone number and e-mail address of the owner and operator;
- (ii) The address (physical location) of the affected source;

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(iii) An identification of the relevant standard (i.e., this subpart); and

- (iv) A brief description of the type of operation. For example, a brief characterization of the types of products (e.g., aerospace components, sports equipment, etc.), the number and type of processes, and the number of workers usually employed.
- (2) Notification of compliance status. If you are the owner or operator of an existing affected source, you must submit a notification of compliance status on or before November 22, 2011. If you are the owner or operator of a new affected source, you must submit a notification of compliance status within 120 days after initial startup, or by November 20, 2008, whichever is later. You are required to submit the information specified in paragraphs (a)(2)(i) through (iv) of this section with your notification of compliance status:
- (i) Your company's name and address;
- (ii) A statement by a responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart;
- (iii) If you operate any spray painting affected sources, the information required by §63.11516(e)(3)(vi)(C), "Compliance demonstration," or §63.11516(e)(4)(ix)(C), "Compliance demonstration," as applicable; and
- (iv) The date of the notification of compliance status.
- (b) What reports must I prepare or submit? –(1) Annual certification and compliance reports. You must prepare and submit annual certification and compliance reports for each affected source according to the requirements of paragraphs (b)(2) through (7) of this section. The annual certification and compliance reporting requirements may be satisfied by reports required under other parts of the CAA, as specified in paragraph (b)(3) of this section.
- (2) Dates. Unless the Administrator has approved or agreed to a different schedule for submission of reports under §63.10(a), "General Provisions," you must prepare and submit each annual certification and compliance report according to the dates specified in paragraphs (b)(2)(i) through (iii) of this section. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
- (i) The first annual certification and compliance report must cover the first annual reporting period which begins the day after the compliance date and ends on December 31.
- (ii) Each subsequent annual certification and compliance report must cover the subsequent semiannual reporting period from January 1 through December 31.
- (iii) Each annual certification and compliance report must be prepared and submitted no later than January 31 and kept in a readily-accessible location for inspector review. If an exceedence has occurred during the year, each annual certification and compliance report must be submitted along with the exceedence reports, and postmarked or delivered no later than January 31.
- (3) Alternate dates. For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, "Title V."
- (i) If the permitting authority has established dates for submitting annual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), "Title V," you may prepare or submit, if required, the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the date specified in paragraph (b)(2)(iii) of this section.
- (ii) If an affected source prepares or submits an annual certification and compliance report pursuant to this section along with, or as part of, the monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), "Title V," and the compliance report includes all required information concerning exceedences of any limitation in this subpart, its submission will be deemed to satisfy any obligation to report the same exceedences in the annual monitoring report. However, submission of an annual certification and compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.
- (4) General requirements. The annual certification and compliance report must contain the information specified in paragraphs (b)(4)(i) through (iii) of this section, and the information specified in paragraphs (b)(5) through (7) of this section that is applicable to each affected source.
- (i) Company name and address;
- (ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report; and

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(iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the 12-month period ending on December 31. Note that the information reported for the 12 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

- (5) Visual determination of fugitive emissions requirements. The annual certification and compliance report must contain the information specified in paragraphs (b)(5)(i) through (iii) of this section for each affected source which performs visual determination of fugitive emissions in accordance with §63.11517(a), "Monitoring requirements."
- (i) The date of every visual determination of fugitive emissions which resulted in detection of visible emissions;
- (ii) A description of the corrective actions taken subsequent to the test; and
- (iii) The date and results of the follow-up visual determination of fugitive emissions performed after the corrective actions.
- (6) Visual determination of emissions opacity requirements. The annual certification and compliance report must contain the information specified in paragraphs (b)(6)(i) through (iii) of this section for each affected source which performs visual determination of emissions opacity in accordance with §63.11517(c), "Monitoring requirements."
- (i) The date of every visual determination of emissions opacity;
- (ii) The average of the six-minute opacities measured by the test; and
- (iii) A description of any corrective action taken subsequent to the test.
- (7) [Reserved]
- (8) Exceedences of 20 percent opacity for welding affected sources. As required by §63.11516(f)(7)(i), "Requirements for opacities exceeding 20 percent," you must prepare an exceedence report whenever the average of the six-minute average opacities recorded during a visual determination of emissions opacity exceeds 20 percent. This report must be submitted along with your annual certification and compliance report according to the requirements in paragraph (b)(1) of this section, and must contain the information in paragraphs (b)(8)(iii)(A) and (B) of this section.
- (A) The date on which the exceedence occurred; and
- (B) The average of the six-minute average opacities recorded during the visual determination of emissions opacity.
- (9) Site-specific Welding Emissions Management Plan reporting. You must submit a copy of the records of daily visual determinations of emissions recorded in accordance with §63.11516(f)(7)(iv), "Tier 3 requirements for opacities exceeding 20 percent," and a copy of your Site-Specific Welding Emissions Management Plan and any subsequent revisions to the plan pursuant to §63.11516(f)(8), "Site-specific Welding Emission Management Plan," along with your annual certification and compliance report, according to the requirements in paragraph (b)(1) of this section
- (c) What records must I keep? You must collect and keep records of the data and information specified in paragraphs (c)(1) through (13) of this section, according to the requirements in paragraph (c)(14) of this section.
- (1) General compliance and applicability records. Maintain information specified in paragraphs (c)(1)(i) through (ii) of this section for each affected source.
- (i) Each notification and report that you submitted to comply with this subpart, and the documentation supporting each notification and report.
- (ii) Records of the applicability determinations as in §63.11514(b)(1) through (5), "Am I subject to this subpart," listing equipment included in its affected source, as well as any changes to that and on what date they occurred, must be maintained for 5 years and be made available for inspector review at any time.
- (2) Visual determination of fugitive emissions records. Maintain a record of the information specified in paragraphs (c)(2)(i) through (iii) of this section for each affected source which performs visual determination of fugitive emissions in accordance with §63.11517(a), "Monitoring requirements."
- (i) The date and results of every visual determination of fugitive emissions;
- (ii) A description of any corrective action taken subsequent to the test; and

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- (iii) The date and results of any follow-up visual determination of fugitive emissions performed after the corrective actions.
- (3) Visual determination of emissions opacity records. Maintain a record of the information specified in paragraphs (c)(3)(i) through (iii) of this section for each affected source which performs visual determination of emissions opacity in accordance with §63.11517(c), "Monitoring requirements."
- (i) The date of every visual determination of emissions opacity; and
- (ii) The average of the six-minute opacities measured by the test; and
- (iii) A description of any corrective action taken subsequent to the test.
- (4) Maintain a record of the manufacturer's specifications for the control devices used to comply with §63.11516, "What are my standards and management practices?"
- (5) Spray paint booth filter records. Maintain a record of the filter efficiency demonstrations and spray paint booth filter maintenance activities, performed in accordance with §63.11516(d)(1)(ii) and (iii), "Requirements for spray painting objects in spray booths or spray rooms."
- (6) Waterspray booth or water curtain efficiency tests. Maintain a record of the water curtain efficiency demonstrations performed in accordance with §63.11516(d)(1)(ii), "Requirements for spray painting objects in spray booths or spray rooms."
- (7) HVLP or other high transfer efficiency spray delivery system documentation records. Maintain documentation of HVLP or other high transfer efficiency spray paint delivery systems, in compliance with §63.11516(d)(3), "Requirements for spray painting of all objects." This documentation must include the manufacturer's specifications for the equipment and any manufacturer's operation instructions. If you have obtained written approval for an alternative spray application system in accordance with §63.11516(d)(2), "Spray painting of all objects," you must maintain a record of that approval along with documentation of the demonstration of equivalency.
- (8) HVLP or other high transfer efficiency spray delivery system employee training documentation records. Maintain certification that each worker performing spray painting operations has completed the training specified in §63.11516(d)(6), "Requirements for spray painting of all objects," with the date the initial training and the most recent refresher training was completed.
- (9)-(10) [Reserved]
- (11) Visual determination of emissions opacity performed during the preparation (or revision) of the Site-Specific Welding Emissions Management Plan. You must maintain a record of each visual determination of emissions opacity performed during the preparation (or revision) of a Site-Specific Welding Emissions Management Plan, in accordance with §63.11516(f)(7)(iii), "Requirements for opacities exceeding 20 percent."
- (12) Site-Specific Welding Emissions Management Plan. If you have been required to prepare a plan in accordance with §63.11516(f)(7)(iii), "Site-Specific Welding Emissions Management Plan," you must maintain a copy of your current Site-Specific Welding Emissions Management Plan in your records and it must be readily available for inspector review.
- (13) Manufacturer's instructions. If you comply with this subpart by operating any equipment according to manufacturer's instruction, you must keep these instructions readily available for inspector review.
- (14) Welding Rod usage. If you operate a new or existing welding affected source which is not required to comply with the requirements of §63.11516(f)(3) through (8) because it uses less than 2,000 pounds per year of welding rod (on a rolling 12-month basis), you must maintain records demonstrating your welding rod usage on a rolling 12-month basis.
- (15) Your records must be maintained according to the requirements in paragraphs (c)(14)(i) through (iii) of this section.
- (i) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1), "General Provisions." Where appropriate, the records may be maintained as electronic spreadsheets or as a database.
- (ii) As specified in §63.10(b)(1), "General Provisions," you must keep each record for 5 years following the date of each occurrence, measurement, corrective action, report, or record.
- (iii) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, corrective action, report, or record according to §63.10(b)(1), "General Provisions." You may keep the records off-site for the remaining 3 years.

§ 63.11520 [Reserved]

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Other Requirements and Information

§ 63.11521 Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by EPA or a delegated authority such as your state, local, or tribal agency. If the EPA Administrator has delegated authority to your state, local, or tribal agency, then that agency, in addition to EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your state, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a state, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the state, local, or tribal agency.
- (c) The authorities that cannot be delegated to state, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.
- (1) Approval of an alternative non-opacity emissions standard under §63.6(g), of the General Provisions of this part.
- (2) Approval of an alternative opacity emissions standard under §63.6(h)(9), of the General Provisions of this part.
- (3) Approval of a major change to test methods under §63.7(e)(2)(ii) and (f), of the General Provisions of this part. A "major change to test method" is defined in §63.90.
- (4) Approval of a major change to monitoring under §63.8(f), of the General Provisions of this part. A "major change to monitoring" under is defined in §63.90.
- (5) Approval of a major change to recordkeeping and reporting under §63.10(f), of the General Provisions of this part. A "major change to recordkeeping/reporting" is defined in §63.90.

§ 63.11522 What definitions apply to this subpart?

The terms used in this subpart are defined in the CAA; and in this section as follows:

Adequate emission capture methods are hoods, enclosures, or any other duct intake devices with ductwork, dampers, manifolds, plenums, or fans designed to draw greater than 85 percent of the airborne dust generated from the process into the control device.

Capture system means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device or to the atmosphere. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

Cartridge collector means a type of control device that uses perforated metal cartridges containing a pleated paper or non-woven fibrous filter media to remove PM from a gas stream by sieving and other mechanisms. Cartridge collectors can be designed with single use cartridges, which are removed and disposed after reaching capacity, or continuous use cartridges, which typically are cleaned by means of a pulse-jet mechanism.

Confined abrasive blasting enclosure means an enclosure that includes a roof and at least two complete walls, with side curtains and ventilation as needed to insure that no air or PM exits the enclosure while dry abrasive blasting is performed. Apertures or slots may be present in the roof or walls to allow for mechanized transport of the blasted objects with overhead cranes, or cable and cord entry into the dry abrasive blasting chamber.

Control device means equipment installed on a process vent or exhaust system that reduces the quantity of a pollutant that is emitted to the air

Dry abrasive blasting means cleaning, polishing, conditioning, removing or preparing a surface by propelling a stream of abrasive material with compressed air against the surface. Hydroblasting, wet abrasive blasting, or other abrasive blasting operations which employ liquids to reduce emissions are not dry abrasive blasting.

Dry grinding and dry polishing with machines means grinding or polishing without the use of lubricating oils or fluids in fixed or stationary machines. Hand grinding, hand polishing, and bench top dry grinding and dry polishing are not included under this definition.

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Fabric filter means a type of control device used for collecting PM by filtering a process exhaust stream through a filter or filter media; a fabric filter is also known as a baghouse.

Facility maintenance means operations performed as part of the routine repair or renovation of process equipment, machinery, control equipment, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity. Facility maintenance also includes operations associated with the installation of new equipment or structures, and any processes as part of janitorial activities. Facility maintenance includes operations on stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Facility maintenance also includes operations performed on mobile equipment, such as fork trucks, that are used in a manufacturing facility and which are maintained in that same facility. Facility maintenance does not include spray-applied coating of motor vehicles, mobile equipment, or items that routinely leave and return to the facility, such as delivery trucks, rental equipment, or containers used to transport, deliver, distribute, or dispense commercial products to customers, such as compressed gas canisters.

Filtration control device means a control device that utilizes a filter to reduce the emissions of MFHAP and other PM.

Grinding means a process performed on a workpiece to remove undesirable material from the surface or to remove burrs or sharp edges. Grinding is done using belts, disks, or wheels consisting of or covered with various abrasives.

Machining means dry metal turning, milling, drilling, boring, tapping, planing, broaching, sawing, cutting, shaving, shearing, threading, reaming, shaping, slotting, hobbing, and chamfering with machines. Shearing operations cut materials into a desired shape and size, while forming operations bend or conform materials into specific shapes. Cutting and shearing operations include punching, piercing, blanking, cutoff, parting, shearing and trimming. Forming operations include bending, forming, extruding, drawing, rolling, spinning, coining, and forging the metal. Processes specifically excluded are hand-held devices and any process employing fluids for lubrication or cooling.

Material containing MFHAP means a material containing one or more MFHAP. Any material that contains cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), and contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing MFHAP.

Metal fabrication and finishing HAP (MFHAP) means any compound of the following metals: Cadmium, chromium, lead, manganese, or nickel, or any of these metals in the elemental form, with the exception of lead.

Metal fabrication and finishing source categories are limited to the nine metal fabrication and finishing source categories with the activities described in Table 1, "Description of Source Categories Affected by this Subpart." Metal fabrication or finishing operations means dry abrasive blasting, machining, spray painting, or welding in any one of the nine metal fabrication and finishing area source categories listed in Table 1, "Description of Source Categories Affected by this Subpart."

Military munitions means all ammunition products and components produced or used by or for the U.S. Department of Defense (DoD) or for the U.S. Armed Services for national defense and security, including military munitions under the control of the DoD, the U.S. Coast Guard, the National Nuclear Security Administration (NNSA), U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: Confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DoD components, including bulk explosives and chemical warfare agents, chemical munitions, biological weapons, rockets, guided and ballistic missiles, bombs, warheads, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, nonnuclear components of nuclear weapons, wholly inert ammunition products, and all devices and components of any items listed in this definition.

Paint means a material applied to a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, coatings, sealants, liquid plastic coatings, caulks, inks, adhesives, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances, or paper film or plastic film which may be precoated with an adhesive by the film manufacturer, are not considered paints for the purposes of this subpart.

Polishing with machines means an operation which removes fine excess metal from a surface to prepare the surface for more refined finishing procedures prior to plating or other processes. Polishing may also be employed to remove burrs on castings or stampings. Polishing is performed using hard-faced wheels constructed of muslin, canvas, felt or leather, and typically employs natural or artificial abrasives. Polishing performed by hand without machines or in bench top operations are not considered polishing with machines for the purposes of this subpart.

Primarily engaged means the manufacturing, fabricating, or forging of one or more products listed in one of the nine metal fabrication and finishing source category descriptions in Table 1, "Description of Source Categories Affected by this Subpart," where this production represents at least 50 percent of the production at a facility, and where production quantities are established by the volume, linear foot, square foot, or other value suited to the specific industry. The period used to determine production should be the previous continuous 12 months of operation. Facilities must document and retain their rationale for the determination that their facility is not "primarily engaged" pursuant to §63.10(b)(3) of the General Provisions.

Quality control activities means operations that meet all of the following criteria:

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(1) The activities are intended to detect and correct defects in the final product by selecting a limited number of samples from the operation, and comparing the samples against specific performance criteria.

- (2) The activities do not include the production of an intermediate or final product for sale or exchange for commercial profit; for example, parts that are not sold and do not leave the facility.
- (3) The activities are not a normal part of the operation;
- (4) The activities do not involve fabrication of tools, equipment, machinery, and structures that comprise the infrastructure of the facility and that are necessary for the facility to function in its intended capacity; that is, the activities are not facility maintenance.

Responsible official means responsible official as defined in 40 CFR 70.2.

Spray-applied painting means application of paints using a hand-held device that creates an atomized mist of paint and deposits the paint on a substrate. For the purposes of this subpart, spray-applied painting does not include the following materials or activities:

- (1) Paints applied from a hand-held device with a paint cup capacity that is less than 3.0 fluid ounces (89 cubic centimeters).
- (2) Surface coating application using powder coating, hand-held, non-refillable aerosol containers, or non-atomizing application technology, including, but not limited to, paint brushes, rollers, hand wiping, flow coating, dip coating, electrodeposition coating, web coating, coil coating, touch-up markers, or marking pens.
- (3) Painting operations that normally require the use of an airbrush or an extension on the spray gun to properly reach limited access spaces; the application of paints that contain fillers that adversely affect atomization with HVLP spray guns, and the application of paints that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.).
- (4) Thermal spray operations (also known as metallizing, flame spray, plasma arc spray, and electric arc spray, among other names) in which solid metallic or non-metallic material is heated to a molten or semi-molten state and propelled to the work piece or substrate by compressed air or other gas, where a bond is produced upon impact.

Spray booth or spray room means an enclosure with four sides and a roof where spray paint is prevented from leaving the booth during spraying by the enclosure. The roof of the spray booth or spray room may contain narrow slots for connecting the parts and products to overhead cranes, or for cord or cable entry into the spray booth or spray room.

Tool or equipment repair means equipment and devices used to repair or maintain process equipment or to prepare molds, dies, or other changeable elements of process equipment.

Totally enclosed and unvented means enclosed so that no air enters or leaves during operation.

Totally enclosed and unvented dry abrasive blasting chamber means a dry abrasive blasting enclosure which has no vents to the atmosphere, thus no emissions. A typical example of this sort of abrasive blasting enclosure is a small "glove box" enclosure, where the worker places their hands in openings or gloves that extend into the box and enable the worker to hold the objects as they are being blasted without allowing air and blast material to escape the box.

Vented dry abrasive blasting means dry abrasive blasting where the blast material is moved by air flow from within the chamber to outside the chamber into the atmosphere or into a control device.

Welding means a process which joins two metal parts by melting the parts at the joint and filling the space with molten metal.

Welding rod containing MFHAP means a welding rod that contains cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), or that contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the welding rod.

§ 63.11523 What General Provisions apply to this subpart?

The provisions in 40 CFR part 63, subpart A, applicable to sources subject to §63.11514(a) are specified in Table 2 of this subpart.

Table 1 to Subpart XXXXXX of Part 63—Description of Source Categories Affected by This Subpart

Metal fabrication and finishing source category	Description
Electrical and Electronic Equipment Finishing Operations	Establishments primarily engaged in manufacturing motors and generators; and electrical machinery, equipment, and supplies, not elsewhere classified. The electrical machinery equipment and supplies industry sector of this source category includes establishments primarily engaged in high energy particle acceleration systems and equipment, electronic simulators, appliance and extension cords, bells and chimes, insect traps, and other electrical equipment and supplies not elsewhere classified. The motors and generators sector of this source category includes establishments primarily engaged in manufacturing electric motors (except engine starting motors) and power generators; motor generator sets; railway motors and control equipment; and motors, generators and control equipment for gasoline, electric, and oil-electric buses and trucks.
Fabricated Metal Products	Establishments primarily engaged in manufacturing fabricated metal products, such as fire or burglary resistive steel safes and vaults and similar fire or burglary resistive products; and collapsible tubes of thin flexible metal. Also, establishments primarily engaged in manufacturing powder metallurgy products, metal boxes; metal ladders; metal household articles, such as ice cream freezers and ironing boards; and other fabricated metal products not elsewhere classified.
Fabricated Plate Work (Boiler Shops)	Establishments primarily engaged in manufacturing power marine boilers, pressure and nonpressure tanks, processing and storage vessels, heat exchangers, weldments and similar products.
Fabricated Structural Metal Manufacturing	Establishments primarily engaged in fabricating iron and steel or other metal for structural purposes, such as bridges, buildings, and sections for ships, boats, and barges.
Heating Equipment, except Electric	Establishments primarily engaged in manufacturing heating equipment, except electric and warm air furnaces, including gas, oil, and stoker coal fired equipment for the automatic utilization of gaseous, liquid, and solid fuels. Products produced in this source category include low-pressure heating (steam or hot water) boilers, fireplace inserts, domestic (steam or hot water) furnaces, domestic gas burners, gas room heaters, gas infrared heating units, combination gas-oil burners, oil or gas swimming pool heaters, heating apparatus (except electric or warm air), kerosene space heaters, gas fireplace logs, domestic and industrial oil burners, radiators (except electric), galvanized iron nonferrous metal range boilers, room heaters (except electric), coke and gas burning salamanders, liquid or gas

solar energy collectors, solar heaters, space heaters (except electric),

Metal fabrication and finishing source category	Description mechanical (domestic and industrial) stokers, wood and coal-burning stoves, domestic unit heaters (except electric), and wall heaters (except
Industrial Machinery and Equipment Finishing Operations	electric). Establishments primarily engaged in construction machinery manufacturing; oil and gas field machinery manufacturing; and pumps and pumping equipment manufacturing. The construction machinery manufacturing industry sector of this source category includes establishments primarily engaged in manufacturing heavy machinery and equipment of types used primarily by the construction industries, such as bulldozers; concrete mixers; cranes, except industrial plant overhead and truck-type cranes; dredging machinery; pavers; and power shovels. Also establishments primarily engaged in manufacturing forestry equipment and certain specialized equipment, not elsewhere classified, similar to that used by the construction industries, such as elevating platforms, ship cranes, and capstans, aerial work platforms, and automobile wrecker hoists. The oil and gas field machinery manufacturing industry sector of this source category includes establishments primarily engaged in manufacturing machinery and equipment for use in oil and gas fields or for drilling water wells, including portable drilling rigs. The pumps and pumping equipment manufacturing sector of this source category includes establishments primarily engaged in manufacturing pumps and pumping equipment for general industrial, commercial, or household use, except fluid power pumps and motors. This category includes establishments primarily engaged in manufacturing domestic water and sump pumps.
Iron and Steel Forging	Establishments primarily engaged in the forging manufacturing process, where purchased iron and steel metal is pressed, pounded or squeezed under great pressure into high strength parts known as forgings. The forging process is different from the casting and foundry processes, as metal used to make forged parts is never melted and poured.
Primary Metals Products Manufacturing	Establishments primarily engaged in manufacturing products such as fabricated wire products (except springs) made from purchased wire. These facilities also manufacture steel balls; nonferrous metal brads and nails; nonferrous metal spikes, staples, and tacks; and other primary metals products not elsewhere classified.
Valves and Pipe Fittings	Establishments primarily engaged in manufacturing metal valves and pipe fittings; flanges; unions, with the exception of purchased pipes; and other valves and pipe fittings not elsewhere classified.

Table 2 to Subpart XXXXXX of Part 63—Applicability of General Provisions to Metal Fabrication or Finishing Area Sources

Instructions for Table 2 —As required in §63.11523, "General Provisions Requirements," you must meet each requirement in the following table that applies to you.

Citation	Subject
63 .1 ¹	Applicability.
63 .2	Definitions.
63 .3	Units and abbreviations.
63.4	Prohibited activities.
63 .5	Construction/reconstruction.
63 .6(a), (b)(1)–(b)(5), (c)(1), (c)(2), (c)(5), (g), (i), (j)	Compliance with standards and maintenance requirements.
63 .9(a)–(d)	Notification requirements.
63 .10(a), (b) except for (b)(2), (d)(1), (d)(4)	Recordkeeping and reporting.
63 .12	State authority and delegations.
63 .13	Addresses of State air pollution control agencies and EPA regional offices.
63 .14	Incorporation by reference.
63 .15	Availability of information and confidentiality.
63 .16	Performance track provisions.

¹§63.11514(g), "Am I subject to this subpart?" exempts affected sources from the obligation to obtain title V operating permits.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Description and Location

Source Name: Mid America Foundation Supply d/b/a MAFCO and

Poseidon Barge

Source Location: 750 East Parr Road, Berne, IN 46711

County: Adams County

SIC Code: 3441 - Fabricated Structural Metal

Exemption No.: E 001-33426-00066
Permit Reviewer: Deborah Cole

On July 12, 2013, the Office of Air Quality (OAQ) received an application from Mid America Foundation Supply d/b/a MAFCO and Poseidon Barge related to the operation of an existing stationary barge manufacturing plant.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Adams County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Linglessifiable	ar attainment affective October 10, 2000, for the 1 hour agency standard which was revolved affective

^{&#}x27;Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

Unclassifiable or attainment effective April 5, 2005, for PM2.5.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) 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_x emissions are considered when evaluating the rule applicability relating to ozone. Adams County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5

Adams County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM_{2.5}, SO₂, and NOx emissions were reviewed pursuant to the requirements for

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Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability - Entire Source section.

(c) Other Criteria Pollutants

Adams 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, hazardous air pollutants, and greenhouse gases 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 Mid America Foundation Supply d/b/a MAFCO and Poseidon Barge on July 12, 2013, relating to the operation of a stationary barge manufacturing source. The source has been operating welding and plasma cutting units and an abrasive blasting unit since 2012. The source added a paint booth in 2013 and submitted an application for review to determine whether an air permit was needed. IDEM determined that the PTE of the source is at exemption levels.

The source consists of the following existing emission unit(s):

- One (1) paint booth, identified as emission unit PB1, constructed in 2013, using an airless (a) spray application method, with a maximum capacity to surface coat 0.1 fabricated metal units per hour using 6.25 gallons of coating per unit, using dry filters for overspray control and exhausting into the plant.
- (b) One (1) MIG welding process consisting of twelve (12) welding units, identified as emissions unit W1-W12, constructed in 2012, with a maximum electrode consumption rate of 0.2 lbs/hr using no control and exhausting into the plant.
 - Under 40 CFR 63, Subpart XXXXXX (6X), the welding process is considered an affected facility.
- (c) One (1) abrasive blasting unit, identified as AB1, constructed in 2012, with a flow rate of 1,000 pounds of structural steel per hour and 20 pounds of grit for a total flow rate of 1,020 pounds per hour, using no control and exhausting into the plant.
- (d) Natural gas combustion of .205 MMBtu per hour.
- Paved roads. (e)

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

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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.

		Potential To Emit of the Entire Source (tons/year)											
Process/ Emission Unit	PM	PM10*	PM2.5*	SO ₂	NOx	VOC	СО	GHGs as CO₂e**	Total HAPs	Worst Single HAP			
Surface Coating	1.22	1.22	1.22	-	-	7.72	-	-	8.37	5.79 (VPM/Naphtha)			
Welding	0.06	0.06	0.06	ı	-	ı	-	-	0.005	0.004 (Mn)			
Abrasive Blasting	0.88	0.61	0.61	ı	-	ı	-	-	ı	-			
Natural Gas Combustion	0.002	0.007	0.007	0.001	0.088	0.005	0.074	106.28	0.002	0.002 (Hexane)			
Fugitive Emissions (Paved Roads)	0.11	0.02	0.01	ı	-	ı	-	-	ı	-			
Total PTE of Entire Source	2.27	1.92	1.91	0.001	0.09	7.72	0.07	106.28	8.38				
Exemptions Levels**	< 5	< 5	< 5	< 10	< 10	< 10	< 25	< 100,000	< 25	< 10			

^{*}Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a regulated air pollutant".

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) 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) 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.
- (c) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

(a) The requirements of the New Source Performance Standard for Surface Coating of Metal Furniture, 40 CFR 60, Subpart EE (60.310 through 60.316) (326 IAC 12), are not included in the permit, since the source does not coat metal furniture.

^{**}The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

(b) The requirements of the New Source Performance Standard for Metal Coil Surface Coating, 40 CFR 60, Subpart TT (60.460 through 60.466) (326 IAC 12), are not included in the permit, since the source does not coat metal coils.

(c) 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)

- (a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Metal Cans, 40 CFR 63, Subpart KKKK (63.3480 through 63.3561) (326 IAC 20-86), are not included in the permit, since this source does not coat metal cans.
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63, Subpart MMMM (63.3880 through 63.3981) (326 IAC 20-80), are not included in the permit, since this source is not a major source of HAPs.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Metal Furniture, 40 CFR 63, Subpart RRRR (63.4880 through 63.4981) (326 IAC 20-78), are not included in the permit, since this source does not coat metal furniture.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Metal Coil, 40 CFR 63, Subpart SSSS (63.5080 through 63.5200) (326 IAC 20-64), are not included in the permit, since this source does not coat metal coil.
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH (63.11169 through 63.11180), are not included in the permit, since this source does not engage in any of the activities listed in 40 CFR 63.11169(a) through (c).
- (f) This source is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63, Subpart XXXXXX (63.11514 through 63.11523), because this source is an area source that is primarily engaged in Fabricated Structural Metal Man (i.e. establishments primarily engaged in fabricating iron and steel or other metal for structural purposes.)

The units subject to this rule include the following which use materials that contain or have the potential to emit metal fabrication or finishing metal HAP (MFHAP):

(b) One (1) MIG welding process consisting of eleven (11) MIG welding units, identified as emissions unit W1-W11, constructed in 2006, with a maximum electrode consumption rate of 0.2 lbs/hr and exhausting into the plant.

Pursuant to 40 CFR 63.11514(b)(5), a welding affected source is the collection of all equipment and activities necessary to perform welding operations which use materials that contain MFHAP, as defined in 40 CFR 63.11522. *Metal fabrication and finishing HAP (MFHAP)* means any compound of the following metals: Cadmium, chromium, lead, manganese, or nickel, or any of these metals in the elemental form, with the exception of lead.

The welding station is considered an existing affected source because Mid America Foundation Supply d/b/a MAFCO & Poseidon Barge commenced construction or reconstruction of the affected source, as defined in 40 CFR 63.2, "General Provisions" to part 63, before April 3, 2008. Mid America Foundation Supply d/b/a MAFCO & Poseidon Barge must achieve compliance with the applicable provisions in this subpart by July 25, 2011.

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Applicable portions of the NESHAP are the following:

- (1) 40 CFR 63.11514(a), (b)
- (2) 40 CFR 63.11515(a)
- (3) 40 CFR 63.11516(f)
- (4) 40 CFR 63.11517
- (5) 40 CFR 63.11519
- (6) 40 CFR 63.11521
- (7) 40 CFR 63.11522
- (8) Table 1
- (9) Table 2

The requirements of 40 CFR 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the source except as otherwise specified in 40 CFR 63, Subpart XXXXXX.

(g) There are no other 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)

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.

State Rule Applicability Determination

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 forty percent (40%) 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.

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- (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 12 (New Source Performance Standards) See Federal Rule Applicability Section of this TSD.
- (h) 326 IAC 20 (Hazardous Air Pollutants) See Federal Rule Applicability Section of this TSD.

Surface Coating Operation

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The paint booth, identified as PB1, does not use roll, flow or brush coating and has the potential to use more than five gallons of paint per day; therefore, 326 IAC 6-3-2 applies.

Pursuant to 326 IAC 6-3-2(d), particulate from the one (1) paint booth, identified as PB1, shall be controlled by a dry particulate filters, and the source shall operate the control device in accordance with manufacturer's specifications.

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

- (1) Repair the control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Registrant 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 visible detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

- (b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
 The paint booth is not subject to the requirements of 326 IAC 8-1-6, because it is subject to the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations).
- (c) 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Coating Operations)
 Pursuant to 326 IAC 8-2-1(a)(4), the surface coating booth, identified as PB1, is subject to the requirements of 326 IAC 8-2-9 because construction commenced after July 1, 1990, the source will apply surface coating to metal parts as in the Standard Industrial Classification Code of major group #34 and actual VOC emissions are greater than fifteen (15) pounds of VOC per day.

Pursuant to 326 IAC 8-2-9(d)(4), the volatile organic compound (VOC) content of the coating utilized in the paint booth, shall be limited to three and five tenths (3.5) pounds of VOCs per gallon of coating less water, for air dried or forced warm air dried coatings.

Berne, Indiana

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Based on the information submitted by the source, the coating delivered to the paint booth has a VOC content less than 3.5 pounds per gallon. Therefore, compliance with 326 IAC 8-2-9 is expected.

Pursuant to 326 IAC 8-2-9(f), work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not limited to, the following:

- (a) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.
- (b) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.
- (c) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.
- (d) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.
- (e) Minimize VOC emissions from the cleaning application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

Welding Stations

- (a) 326 IAC 6-3-1 (Particulate Emission Limitations for Manufacturing Processes)
 Pursuant to 326 IAC 6-3-1(b)(9), the eleven (11) metal inert gas (MIG) welding stations are
 exempt from the requirements of 326 IAC 6-3 because each station consumes less than 625
 pounds of rod or wire per day.
- (b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) The welding stations and plasma cutting are not subject to the requirements of 326 IAC 8-1-6, because they do not have the potential to emit VOC.

Abrasive Blasting

326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices and Control Technologies) Pursuant to 326 IAC 6-3-2(e)(2), when the process weight rate is less than one hundred (100) pounds per hour, the allowable rate of emission is five-hundred fifty-one thousandths (0.551) pounds per hour.

Natural Gas Fired Heaters

- (a) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating) The natural gas fired heaters are not subject to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating), because, pursuant to 326 IAC 1-2-19, these emission units do not meet the definition of an indirect heating unit.
- (b) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) The natural gas fired heaters are exempt from the requirements of 326 IAC 6-3, because, pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Mid America Foundation Supply, Inc. d/b/a MAFCO and Poseidon Barge Berne. Indiana

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(c) 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)

This source is not subject to 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations) because the potential to emit sulfur dioxide from each natural gas-fired heater unit is less than twenty-five (25) tons per year and ten (10) pounds per hour.

- (d) 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
 The natural gas-fired heaters are not subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), because they each have the potential to emit VOC of less than twenty-five (25) tons per year.
- (e) 326 IAC 9-1-1 (Carbon Monoxide Emission Limits)
 The natural gas-fired heaters are not subject to 326 IAC 9-1-1 (Carbon Monoxide Emission Limits) because there is no applicable emission limits for the source under 326 IAC 9-1-2.
- (f) 326 IAC 10-1-1 (Nitrogen Oxides Control) The natural gas-fired heaters are not subject to 326 IAC 10-1-1 (Nitrogen Oxides Control) because the source is not located in Clark or Floyd counties.

Conclusion and Recommendation

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 12, 2013. Additional information was provided by the source on July 31 and August 12, 2013.

The operation of this source shall be subject to the conditions of the attached proposed Exemption No. 155-33426-00008. The staff recommends to the Commissioner that this Exemption be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Deborah Cole 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) 234-5377 or toll free at 1-800-451-6027 ext. 4-5377.
- (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.in.gov/idem

Appendix A: Emission Calculations Emission Summary

Company Name: MidAmerica Foundation Supply d/b/a MAFCO & Poseiden Barge

Address City IN Zip: 750 East Parr Road, Berne, IN 46711

Permit Number: E001-33426-00066 Reviewer: Deborah Cole

Pollutant	РМ	PM10	PM2.5	SO2	NOX	voc	со	GHG	Total HAPS	Single HAP	
Surface Coating	1.22	1.22	1.22	-	-	7.72	-	-	8.37	5.79	VPM/Naphtha
Welding	0.06	0.06	0.06	-	-	-	-	-	0.005	0.004	Mn
Abrasive Blasting	0.88	0.61	0.61	ı	ı	ı	-	•	ı	ı	
Natural Gas Combustion	0.002	0.007	0.007	0.001	0.088	0.005	0.074	106.28	0.002	0.002	Hexane
Paved Roads	0.11	0.02	0.01	-	-	-	-	-	-	-	
TOTALS	2.27	1.92	1.91	0.00	0.09	7.72	0.07	106.28	8.38		

PTE is based on 8,760 hours of operation.

Appendix A: Emissions Calculations VOC and Particulate From Surface Coating Operations

Company Name: MidAmerica Foundation Supply d/b/a MAFCO & Poseiden Barge Address City IN Zip: 750 East Parr Road, Berne, IN 46711 Permit Number: E001-33426-00066

Reviewer: Deborah Cole

	Material		Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non- Volatiles (solids)	Gal of Mat. (gal/unit)		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
В	Bariline Express Prime - But	11.76	23.98%	0.0%	23.98%	0.0%	55.80%	6.25	0.10	2.82	2.82	1.76	42.30	7.72	1.22	5.05	95%

Total Potentional to Emit 1.76 42.30 7.72 1.22

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (Ib/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (Ib/gal) * Weight % Organics)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (Ib/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (Ib/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (Ib/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) * (gal/gal) * (* Veigling* Volatiles) * (1-Transfer efficiency) * (8760 hr/s/yr) * (1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (Ibs/gal) * Weight % organics) / (Volume % solids)

surcoat.xls 9/95

0.3

0.97

Appendix A: Emission Calculations HAP Emission Calculations

Company Name: MidAmerica Foundation Supply d/b/a MAFCO & Poseiden Barge Address City IN Zip: 750 East Parr Road, Berne, IN 46711 E001-33426-00066

Reviewer: Deborah Cole

		Gallons of										Carbon	Titanium	
Material	Density	Material	Maximum	Weight %	Weight %	Weight %	Weight %	Weight %	VMP/Naphtha	Mineral Spirits	Methanol	Black	Dioxide	
	(Lb/Gal)	(gal/unit)	(unit/hour)	VMP/Naphtha	Mineral Spirits	Methanol	Carbon Black	Titanium Dioxide	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	
Emission Unit 1								Benzene						TOTAL HAPS
Bariline Express Prime-Buff	11.76	6.25	0.10	18.00%	3.00%	1.00%	1.00%	3.00%	5.79	0.97	0.32	0.32	0.97	8.37
Barrino Express Frince Barr	11110	0.20	0.10	10.0070	0.0070	1.0070	1.0070	0.0070	0.10	0.07	0.02	0.02	0.01	

5.8

1.0

0.3

METHODOLOGY

Total Potentional to Emit

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: Emissions Calculations Welding and Thermal Cutting

Company Name: MidAmerica Foundation Supply d/b/a MAFCO & Poseiden Barge

Address City IN Zip: 750 East Parr Road, Berne, IN 46711

Permit Number: E001-33426-00066 Reviewer: Deborah Cole

PROCESS	Number of	Max. electrode			EMISSION F				EM	ISSIONS		HAPS
	Stations	consumption per			(lb pollutant/l	b electrode)				(lbs/hr)		(lbs/hr)
WELDING		station (lbs/hr)		PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Submerged Arc				0.036	0.011			0.000	0.000	0.000	0	0.000
Metal Inert Gas (MIG)(carbon steel)	12	0.2		0.0055	0.0005			0.013	0.001	0.000	0	0.001
Stick (E7018 electrode)				0.0211	0.0009			0.000	0.000	0.000	0	0.000
Tungsten Inert Gas (TIG)(carbon steel)				0.0055	0.0005			0.000	0.000	0.000	0	0.000
Oxyacetylene(carbon steel)				0.0055	0.0005			0.000	0.000	0.000	0	0.000
	Number of	Max. Metal	Max. Metal	EMISSION FACTORS			EMISSIONS				HAPS	
	Stations	Thickness	Cutting Rate	(lb pollutant/1,000 inches cut, 1" thick)**			(lbs/hr)			(lbs/hr)		
FLAME CUTTING		Cut (in.)	(in./minute)	PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
		` '	,									
Oxyacetylene				0.1622	0.0005	0.0001	0.0003	0.000	0.000	0.000	0.000	0.000
Oxymethane				0.0815	0.0002		0.0002	0.000	0.000	0.000	0.000	0.000
Plasma**				0.0039				0.000	0.000	0.000	0.000	0.000
EMISSION TOTALS												
Potential Emissions lbs/hr								0.013				0.00
												0.00
Potential Emissions lbs/day								0.317				0.03
												0.00
Potential Emissions tons/year								0.058				0.01

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 calculting 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 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.

Company Name: MidAmerica Foundation Supply d/b/a MAFCO & Poseiden Barge

Address City IN Zip: 750 East Parr Road, Berne, IN 46711

Permit Number: E001-33426-00066 Reviewer: Deborah Cole

Table 1 - Emission Factors for Abrasives

	Emission Factor (EF)						
Abrasive	lb PM / lb abrasive	lb PM10 / lb PM					
Sand	0.041	0.70					
Grit	0.010	0.70					
Steel Shot	0.004	0.86					
Other	0.010						

FR = Flow rate of actual abrasive (lb/hr) =	20.00	lb/hr (per no	ozzle)		
w = fraction of time of wet blasting =	0	%	- /		
N = number of nozzles =	1				
EF = PM emission factor for actual abrasive from Table 1 =	0.010	lb PM/ lb abrasive			
PM10 emission factor ratio for actual abrasive from Table 1 =	0.70	b PM10 / lb	lb PM10 / lb PM		
	PM	PM10			
Potential to Emit =	0.20	0.14	lb/hr		
=	4.80	3.36	lb/day		
■ The state of th	0.88	0.61	ton/yr		

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)

Potential to Emit (before control) = EF x FR x (1 - w/200) x N (where w should be entered in as a whole number (if w is 50%, enter 50))

Potential to Emit (after control) = [Potential to Emit (before control)] * [1 - control efficiency]
Potential to Emit (tons/year) = [Potential to Emit (lbs/hour)] x [8760 hours/year] x [ton/2000 lbs]

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

Company Name: MidAmerica Foundation Supply d/b/a MAFCO & Poseiden Barge Address City IN Zip: 750 East Parr Road, Berne, IN 46711

Permit Number: E001-33426-00066 Reviewer: Deborah Cole

Unit	Heat Input Capacity	HHV	Potential T	hroughput
	MMBtu/hr	mmBtu	MMCF/yr	
		mmscf		
		1020		
Shop Heater	0.205		1.76	
	0.205		1.76	

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100	5.5	84
					**see below		
Potential Emission in tons/yr	0.002	0.007	0.007	0.001	0.088	0.005	0.074

^{*}PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 combined.

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/1,020 MMBtu

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

HAPS Calculations

	HAPs - Organics						
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenze ne 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	Total - Organics	
Potential Emission in tons/yr	0.00000	0.00000	0.00007	0.00158	0.00000	0.00166	

		HAPs - Metals						
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium	Chromium	Manganese	Nickel 2.1E-03	Total - Metals		
	0.02 0 1	2 00	2 00	0.02 01	22 00			
Potential Emission in tons/yr	0.00000044	0.00000097	0.00000123	0.00000033	0.00000185	0.00000482		
					Total HAPs	0.00166		

Methodology is the same as above.

Worst HAP 0.00158

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

Greenhouse Gas Calculations

		Greenhouse Ga	is
Emission Factor in lb/MMcf	CO2 120,000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	105.64	0.00	0.00
Summed Potential Emissions in tons/yr		105.64	
CO2e Total in tons/yr		106.28	

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64. $Emission\ Factors\ are\ from\ AP\ 42,\ Table\ 1.4-2\ SCC\ \#1-02-006-02,\ 1-01-006-02,\ 1-03-006-02,\ and\ 1-03-006-03.$ Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A. $\label{eq:emission} \mbox{Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton} \mbox{}$ CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

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

Appendix A: Emission Calculations Fugitive Dust Emissions - Paved Roads

Company Name: MidAmerica Foundation Supply d/b/a MAFCO & Poseiden Barge Address City IN Zip: 750 East Parr Road, Berne, IN 46711 Permit Number: E001-33426-00066

Reviewer: Deborah Cole

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

	Maximum			Maximum					
	number of	Number of one-	Maximum trips	Weight	Total Weight	Maximum one-	Maximum one-	Maximum one-	Maximum one-
	vehicles per	way trips per	per day	Loaded	driven per day	way distance	way distance	way miles	way miles
Туре	day	day per vehicle	(trip/day)	(tons/trip)	(ton/day)	(feet/trip)	(mi/trip)	(miles/day)	(miles/yr)
Vehicle (entering plant, one-way trip)	1.0	1.0	1.0	1.0	1.0	10,000	1.894	1.9	691.29
Vehicle (leaving plant, one-way trip)	1.0	1.0	1.0	1.0	1.0	10,000	1.894	1.9	691.29
Employee Vehicle (entering plant, one-way trip)	24.0	1.0	24.0	1.0	24.0	10,000	1.894	45.5	16,590.91
Employee Vehicle (leaving plant, one-way trip)	24.0	1.0	24.0	1.0	24.0	10,000	1.894	45.5	16,590.91
		Totals	50.0		50.0			94.7	34.564.39

Average Vehicle Weight Per Trip = Average Miles Per Trip = 1.89 miles/trip

Unmitigated Emission Factor, Ef = $[k * (sL)^0.91 * (W)^1.02]$ (Equation 1 from AP-42 13.2.1)

				_
	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	1.0	1.0	1.0	tons = average vehicle weight (provided by source)
sL =	0.6	0.6	0.6	g/m^2 = Ubiquitors Baseline silt loading value for paved roads - AP 42 Table 13.2.1-2)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, Eext = $\begin{bmatrix} F^* [1 - (p/4N)] \\ where p = \\ N = \end{bmatrix}$ da da

days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2) days per year

PM PM10 PM2.5 Unmitigated Emission Factor, Ef = 0.007 lb/mile 0.001 0.0003 Mitigated Emission Factor, Eext =

Dust Control Efficiency =

	Unmitigated	Unmitigated	Unmitigated	Mitigated	Mitigated PTE	Mitigated PTE	Controlled	Controlled PTE	Controlled PTE
	PTE of PM	PTE of PM10	PTE of PM2.5	PTE of PM	of PM10	of PM2.5	PTE of PM	of PM10	of PM2.5
Process	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Vehicle (entering plant) (one-way trip)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vehicle (leaving plant) (one-way trip)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.06	0.01	0.00	0.05	0.01	0.00	0.05	0.01	0.00
	0.06	0.01	0.00	0.05	0.01	0.00	0.05	0.01	0.00
Totals	0.12	0.02	0.01	0.11	0.02	0.01	0.11	0.02	0.01

Methodology

Total Weight driven per day (ton/day) Maximum one-way distance (mi/trip) Maximum one-way miles (miles/day)
Average Vehicle Weight Per Trip (ton/trip) Average Miles Per Trip (miles/trip) Unmitigated PTE (tons/yr) Mitigated PTE (tons/yr)
Controlled PTE (tons/yr)

Abbreviations

PM = Particulate Matter PM10 = Particulate Matter (<10 um) PM2.5 = Particle Matter (<2.5 um) PTE = Potential to Emit

- = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
 = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
 = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
 = SUM[Total Weight driven per day (tron/day)] * SUM[Maximum trips per day (trip/day)]
 = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
 = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 = [Maximum one-way miles (miles/yr)] * [Mittigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 = [Mitigated PTE (tons/yr)] * [1 Dust Control Efficiency]



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Michael R. Pence Governor Thomas W. Easterly

Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Dale Bullion

Quality Manager

Mid America Foundation Supply, Inc. dba MAFCO and Poseidon Barge

3101 New Have Avenue Fort Wayne, IN 46803

DATE: October 29, 2013

FROM: Matt Stuckey, Branch Chief

Permits Branch Office of Air Quality

SUBJECT: Final Decision

Exempt Construction and Operation Status

001-33426-00066

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Mary Hagbergger-Fox – President
Jennifer Aselage – Engineering & Environmental Consultant
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at ibrush@idem.IN.gov.

Final Applicant Cover letter.dot 6/13/2013



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IDEM Staff	GHOTOPP 10/2	9/2013		
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											Remarks	
1		Dale Bulloin MidAmerica Foundation Supply Inv dba MAFCO & Posei 3101 New Have	n Ave Fort W	ayne IN 4680	3 (Source CAATS) v	ia confirmed	I delivery					
2		Mary Hagbegger-Fox President MidAmerica Foundation Supply Inv dba MAFCO & Po	osei 3101 Nev	w Haven Ave I	Fort Wayne IN 4680	3 (RO CAA	TS)					
3		Adams County Commissioners 313 West Jefferson Street Decatur IN 46733 (Local Official)										
4		Adams County Health Department County Svcs Complex, 313 W. Jefferson # 314 Decatur IN 46733-1673 (Health Department)										
5		Berne City Council and Mayors Office 158 W. Franklin St. Berne IN 46711 (Local Official)										
6		Mrs. Jennifer Aselage Engineering & Enivronmental Consultant 7811 Honeywell Drive	Fort Wayne I	N 46825 (Co.	nsultant)							
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