



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: July 25, 2007
RE: Valmont Structures, Inc. / 099-23551-00054
FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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 IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require 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, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 03/23/06



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100 North Senate Avenue
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Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**Valmont Structures, Inc., d.b.a. PiRod, Inc.
1200 N. Oak Road, 905 Markley Drive, 100 Jim Neu Drive, and
1545 Pidco Drive
Plymouth, Indiana 46563**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 099-23551-00054	
Original signed by:	Issuance Date: July 25, 2007
Nisha Sizemore, Chief Permits Branch Office of Air Quality	Expiration Date: July 25, 2012

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 and A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a metal tower construction source.

Source Address:	1200 N. Oak Road, 905 Markley Drive, 100 Jim Neu Drive, and 1545 Pidco Drive, Plymouth, Indiana 46563
Mailing Address:	1545 Pidco Drive, Plymouth, Indiana 46563
General Source Phone Number:	574-936-4221
SIC Code:	3441
County Location:	Marshall
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Source Definition

This metal tower construction source consists of five (5) plants:

- (a) The source location is identified as 1200 N. Oak Road, Plymouth, Indiana 46563
- (b) Plant 3 is located at 905 Markley Drive, Plymouth, Indiana 46563
- (c) Plant 4 is located at 100 Jim Neu Drive, Plymouth, Indiana 46563
- (d) Plants 1, 2 and 5 are located at 1545 Pidco Drive, Plymouth, Indiana 46563

Since the five (5) plants are located on contiguous properties, have the same SIC codes and are owned by one (1) company, they will be considered one (1) source.

A.3 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) paint booth, identified as PB1, installed in 1981, exhausting to Stacks S1 - S4, equipped with dry filters for particulate overspray control, capacity: 4.744 linear feet of metal per hour.
- (b) One (1) shotblaster, identified as DC1, installed in 1981, exhausting to Stack SC1 or inside, equipped with a baghouse, capacity: 2,836 pounds of metal per hour.
- (c) Thirty-three (33) MIG welders, identified as MIG 1 through MIG 33, constructed between 1992 and 2000, capacity: 196 pounds of carbon steel and 6.0 pounds of electrode consumption per hour, each.
- (d) Thirty-five (35) metal inert gas (MIG) welding stations, identified as MIG 34 through MIG 68, constructed between 1980 and 1996, capacity: 196 pounds of carbon steel and 2.35 pounds

of welding wire per hour, each.

- (e) Three (3) oxyacetylene flame cutting machines, each with four (4) cutting stations, constructed from 1980 to 1994, capacity: 5 inches of 3-inch thick metal per minute, per cutting head and 31.8 pounds of carbon steel per cutting station.
- (f) One (1) tableblaster, identified as MT 1800, constructed in 2000, exhausting to the interior of the building, equipped with a canister dust collector, capacity: 100 pounds of steel per hour.
- (g) One (1) portable pipe blaster, identified as 1-8-D, constructed in 1995, exhausting to the interior of the building, equipped with a canister dust collector, capacity: 100 pounds of steel per hour.
- (h) One (1) cold cleaner degreaser, identified as Plant #1 degreaser, constructed in 1999, capacity: 1.28 gallons of solvent per day.
- (i) One (1) cold cleaner degreaser, identified as Plant #3 degreaser, constructed in 1998, capacity: 0.41 gallons of solvent per day.
- (j) One (1) natural gas-fired furnace, located in Plant #1, identified as H1, constructed in 1979, heat input capacity: 0.06 million British thermal units per hour.
- (k) Five (5) natural gas-fired furnaces, located in Plant #1, identified as H2-H6, constructed in 1976, heat input capacity: 0.10 million British thermal units per hour, each.
- (l) One (1) natural gas-fired furnace, located in Plant #1, identified as H7, constructed in 1973, heat input capacity: 0.16 million British thermal units per hour.
- (m) One (1) natural gas-fired furnace, located in Plant #1, identified as H8, constructed in 1973, heat input capacity: 0.175 million British thermal units per hour.
- (n) Five (5) natural gas-fired furnaces, located in Plant #1, identified as H9-13, constructed in 1996, heat input capacity: 0.30 million British thermal units per hour, each.
- (o) One (1) natural gas-fired furnace, located in Plant #1, identified as H14, constructed in 1985, heat input capacity: 0.40 million British thermal units per hour.
- (p) Two (2) natural gas-fired furnaces, located in Plant #1, identified as H15 and H16, constructed in 1979, heat input capacity: 1.20 million British thermal units per hour, each.
- (q) One (1) natural gas-fired furnace, located in Plant #2, identified as H17, constructed in 1995, heat input capacity: 0.05 million British thermal units per hour.
- (r) Eight (8) natural gas-fired furnaces, located in Plant #2, identified as H18-H25, constructed in 1995, heat input capacity: 0.14 million British thermal units per hour, each.
- (s) Two (2) natural gas-fired furnaces, located in Plant #2, identified as H26 and H27, constructed in 1995, heat input capacity: 0.40 million British thermal units per hour, each.
- (t) One (1) natural gas-fired furnace, located in Plant #3, identified as H28, constructed in 1980, heat input capacity: 0.075 million British thermal units per hour.
- (u) One (1) natural gas-fired furnace, located in Plant #3, identified as H29, constructed in 1980, heat input capacity: 0.175 million British thermal units per hour.

- (v) One (1) natural gas-fired furnace, located in Plant #3, identified as H30, constructed in 1980, heat input capacity: 0.30 million British thermal units per hour.
- (w) Two (2) natural gas-fired furnaces, located in Plant #3, identified as H31 and H32, constructed from 1980 to 1988, heat input capacity: 0.40 million British thermal units per hour, each.
- (x) One (1) natural gas-fired furnace, located in Plant #4, identified as H33, constructed in 1996, heat input capacity: 0.045 million British thermal units per hour.
- (y) One (1) natural gas-fired furnace, located in Plant #4, identified as H34, constructed in 1999, heat input capacity: 0.120 million British thermal units per hour.
- (z) Three (3) natural gas-fired furnaces, located in Plant #4, identified as H35-H37, constructed in 1996, heat input capacity: 0.40 million British thermal units per hour, each.
- (aa) Two (2) natural gas-fired furnaces, located in Plant #4, identified as H38 and H39, constructed in 1999, heat input capacity: 0.58 million British thermal units per hour, each.
- (bb) Two (2) natural gas-fired furnaces, located in Plant #5, identified as H40 and H41, constructed in 1978, heat input capacity: 0.090 million British thermal units per hour, each.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)] [326 IAC 2-1.1-9.5] [IC 13-15-3-6(a)]

- (a) This permit, MSOP 099-23551-00054, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-3-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP require-

ments of 326 IAC 1-6-3 for that unit.

B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to MSOP 099-23551-00054 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.13 Permit Renewal [326 IAC 2-6.1-7]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
- (1) Submitted at least ninety (90) days prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.15 Source Modification Requirement

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2] [IC13-17-3-2] [IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.18 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.19 Credible Evidence [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than one hundred (100) pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 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.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

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

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least two hundred sixty (260) linear feet on pipes or one hundred sixty (160) square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control

The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applic-

able for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least seventy-five hundredths (0.75) cubic feet on all facility components.

- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee

shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 Instrument Specifications [326 IAC 2-1.1-11]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.14 Response to Excursions or Exceedances

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records;
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.

- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.16 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.17 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description: Paint booth

- (a) One (1) paint booth, identified as PB1, installed in 1981, exhausting to Stacks S1 - S4, equipped with dry filters for particulate overspray control, capacity: 4.744 linear feet of metal per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9, the Permittee shall not allow the discharge into the atmosphere VOC in excess of three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, as delivered to the applicators at the one (1) paint booth, identified as PB1.

D.1.2 Volatile Organic Compound (VOC) Limitations, Clean-up Requirements [326 IAC 8-2-9(f)]

Pursuant to 326 IAC 8-2-9(f), all solvents sprayed from the application equipment of the one (1) paint booth, identified as PB1, during cleanup or color changes shall be directed into containers. Said containers shall be closed as soon as the solvent spraying is complete. In addition, all waste solvent shall be disposed of in such a manner that minimizes evaporation

D.1.3 Particulate [326 IAC 6-3-2(d)]

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 filter and the Permittee shall operate the control device in accordance with manufacturer's specifications. If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:

- (a) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (b) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground. If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) paint booth, identified as PB1, and its dry particulate filters.

Compliance Determination Requirements

D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

Compliance with the VOC content limitation contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.6 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC content limitation established in Condition D.1.1. Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
 - (1) The VOC content of each coating material and solvent used.
 - (2) The amount of coating material and solvent less water used on a monthly basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
- (b) To document compliance with Condition D.1.3, the Permittee shall maintain records as required by Condition D.1.3.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description: Shot blasting and MIG Welding

- (b) One (1) shotblaster, identified as DC1, installed in 1981, exhausting to Stack SC1 or inside, equipped with a baghouse, capacity: 2,836 pounds of metal per hour.
- (c) Thirty-three (33) MIG welders, identified as MIG 1 through MIG 33, constructed between 1992 and 2000, capacity: 196 pounds of carbon steel and 6.0 pounds of electrode consumption per hour, each.
- (d) Thirty-five (35) metal inert gas (MIG) welding stations, identified as MIG 34 through MIG 68, constructed between 1980 and 1996, capacity: 196 pounds of carbon steel and 2.35 pounds of welding wire per hour, each.
- (e) Three (3) oxyacetylene flame cutting machines, each with four (4) cutting stations, constructed from 1980 to 1994, capacity: 5 inches of 3-inch thick metal per minute, per cutting head and 31.8 pounds of carbon steel per cutting station.
- (f) One (1) tableblaster, identified as MT 1800, constructed in 2000, exhausting to the interior of the building, equipped with a canister dust collector, capacity: 100 pounds of steel per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the one (1) shotblaster, identified as DC1, the thirty-three (33) MIG welders, identified as MIG 1 through MIG 33, the thirty-five (35) MIG welders, identified as MIG 34, through MIG 68, the three (3) oxyacetylene flame cutting machines, each with four (4) cutting stations, and the one (1) tableblaster, identified as MT 1800 shall be limited to the values in the following table:

Emission Unit	Process Weight Rate (tons/hr)	Allowable Particulate Emissions (lbs/hr)
Thirty-three (33) MIG welders, identified as MIG 1 through MIG 33	0.101, each	0.883, each
Thirty-five (35) MIG welders, identified as MIG 34 through MIG 68	0.099, each	0.872, each
Three (3) oxyacetylene flame cutting machines, each with four (4) cutting stations	0.016, each cutting station	0.256, each cutting station
One (1) shotblaster, identified as DC1	1.42	5.19
One (1) tableblaster, identified as MT 1800	0.050	0.551

The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) shotblaster, identified as DC1, and its baghouse, and the one (1) tableblaster, identified as MT-1800, and its dust collector.

Compliance Determination Requirements

D.2.3 Particulate Control

- (a) In order to comply with D.2.1, the baghouse and the dust collector for particulate control shall be in operation and control emissions from the shotblaster, identified as DC1, and the tableblaster, identified as MT-1800, at all times that the facilities are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.4 Visible Emissions Notations

- (a) Visible emission notations of the one (1) shotblaster, identified as DC1, stack exhaust (SC1) shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.5 Baghouse Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the one (1) shotblaster, identified as DC1, at least once per day when the facility is in operation and exhausting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 4.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.6 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced.
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, or dust traces.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.7 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain a daily record of visible emission notations of the one (1) shotblaster, identified as DC1, stack exhaust when exhausting to the atmosphere. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the shotblaster did not operate that day).
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain a daily record of the pressure drop across the baghouse controlling the one (1) shotblaster, identified as DC1, when exhausting to the atmosphere. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the shotblaster did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description: Degreasing

- (h) One (1) cold cleaner degreaser, identified as Plant #1 degreaser, constructed in 1999, capacity: 1.28 gallons of solvent per day.
- (i) One (1) cold cleaner degreaser, identified as Plant #3 degreaser, constructed in 1998, capacity: 0.41 gallons of solvent per day.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the

drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**MINOR SOURCE OPERATING PERMIT
CERTIFICATION**

Source Name: Valmont Structures, Inc., d.b.a. Pirod, Inc.
Source Address: 1200 N. Oak Road, 905 Markley Drive, 100 Jim Neu Drive, and 1545 Pidco Drive,
Plymouth, Indiana 46563
Mailing Address: 1545 Pidco Drive, Plymouth, Indiana 46563
Permit No.: MSOP 099-23551-00054

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify) _____
- Report (specify) _____
- Notification (specify) _____
- Affidavit (specify) _____
- Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Source Name:	Valmont Structures, Inc., d.b.a. Pirod, Inc.
Address:	1200 N. Oak Road, 905 Markley Drive, 100 Jim Neu Drive, and 1545 Pidco Drive
City:	Plymouth, Indiana 46563
Phone #:	574-936-4221
MSOP #:	099-23551-00054

I hereby certify that Valmont Structures, Inc., d.b.a. Pirod, Inc. is

- still in operation.
- no longer in operation.

I hereby certify that Valmont Structures, Inc., d.b.a. Pirod, Inc. is

- in compliance with the requirements of MSOP 099-23551-00054.
- not in compliance with the requirements of MSOP 099-23551-00054.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-6865**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF >MALFUNCTION= AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Minor Source Operating Permit Renewal

Source Background and Description

Source Name:	Valmont Structures, Inc., d.b.a. PiRod, Inc.
Source Location:	1200 N. Oak Road, Plymouth, Indiana 46563 905 Markley Drive, Plymouth, Indiana 46563 100 Jim Neu Drive, Plymouth, Indiana 46563 1545 Pidco Drive, Plymouth, Indiana 46563
County:	Marshall
SIC Code:	3441
Permit Renewal No.:	MSOP 099-23551-00054
Permit Reviewer:	Michael A. Morrone/MES

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Valmont Structures, Inc., d.b.a. PiRod, Inc. relating to the operation of a metal tower construction source.

History

On August 28, 2006, Valmont Structures, Inc., d.b.a. PiRod, Inc. submitted an application to the OAQ requesting to renew its operating permit. Valmont Structures, Inc., d.b.a. PiRod, Inc. was issued an MSOP on November 28, 2001.

Source Definition

This metal tower construction source consists of five (5) plants:

- (a) The source location is identified as 1200 N. Oak Road, Plymouth, Indiana 46563
- (b) Plant 3 is located at 905 Markley Drive, Plymouth, Indiana 46563
- (c) Plant 4 is located at 100 Jim Neu Drive, Plymouth, Indiana 46563
- (d) Plants 1, 2 and 5 are located at 1545 Pidco Drive, Plymouth, Indiana 46563

Since the five (5) plants are located on contiguous properties, have the same SIC codes and are owned by one (1) company, they will be considered one (1) source.

Permitted Emission Units and Pollution Control Equipment

- (a) One (1) paint booth, identified as PB1, installed in 1981, exhausting to Stacks S1 - S4, equipped with dry filters for particulate overspray control, capacity: 4.744 linear feet of metal per hour.
- (b) One (1) shotblaster, identified as DC1, installed in 1981, exhausting to Stack SC1 or inside, equipped with a baghouse, capacity: 2,836 pounds of metal per hour.
- (c) Thirty-three (33) MIG welders, identified as MIG 1 through MIG 33, constructed between 1992 and 2000, capacity: 196 pounds of carbon steel and 6.0 pounds of electrode consumption per hour, each.

- (d) Thirty-five (35) metal inert gas (MIG) welding stations, identified as MIG 34 through MIG 68, constructed between 1980 and 1996, capacity: 196 pounds of carbon steel and 2.35 pounds of welding wire per hour, each.
- (e) Three (3) oxyacetylene flame cutting machines, each with four (4) cutting stations, constructed from 1980 to 1994, capacity: 5 inches of 3-inch thick metal per minute, per cutting head and 31.8 pounds of carbon steel per cutting station.
- (f) One (1) tableblaster, identified as MT 1800, constructed in 2000, exhausting to the interior of the building, equipped with a canister dust collector, capacity: 100 pounds of steel per hour.
- (g) One (1) portable pipe blaster, identified as 1-8-D, constructed in 1995, exhausting to the interior of the building, equipped with a canister dust collector, capacity: 100 pounds of steel per hour.
- (h) One (1) cold cleaner degreaser, identified as Plant #1 degreaser, constructed in 1999, capacity: 1.28 gallons of solvent per day.
- (i) One (1) cold cleaner degreaser, identified as Plant #3 degreaser, constructed in 1998, capacity: 0.41 gallons of solvent per day.
- (j) One (1) natural gas-fired furnace, located in Plant #1, identified as H1, constructed in 1979, heat input capacity: 0.06 million British thermal units per hour.
- (k) Five (5) natural gas-fired furnaces, located in Plant #1, identified as H2-H6, constructed in 1976, heat input capacity: 0.10 million British thermal units per hour, each.
- (l) One (1) natural gas-fired furnace, located in Plant #1, identified as H7, constructed in 1973, heat input capacity: 0.16 million British thermal units per hour.
- (m) One (1) natural gas-fired furnace, located in Plant #1, identified as H8, constructed in 1973, heat input capacity: 0.175 million British thermal units per hour.
- (n) Five (5) natural gas-fired furnaces, located in Plant #1, identified as H9-13, constructed in 1996, heat input capacity: 0.30 million British thermal units per hour, each.
- (o) One (1) natural gas-fired furnace, located in Plant #1, identified as H14, constructed in 1985, heat input capacity: 0.40 million British thermal units per hour.
- (p) Two (2) natural gas-fired furnaces, located in Plant #1, identified as H15 and H16, constructed in 1979, heat input capacity: 1.20 million British thermal units per hour, each.
- (q) One (1) natural gas-fired furnace, located in Plant #2, identified as H17, constructed in 1995, heat input capacity: 0.05 million British thermal units per hour.
- (r) Eight (8) natural gas-fired furnaces, located in Plant #2, identified as H18-H25, constructed in 1995, heat input capacity: 0.14 million British thermal units per hour, each.
- (s) Two (2) natural gas-fired furnaces, located in Plant #2, identified as H26 and H27, constructed in 1995, heat input capacity: 0.40 million British thermal units per hour, each.
- (t) One (1) natural gas-fired furnace, located in Plant #3, identified as H28, constructed in 1980, heat input capacity: 0.075 million British thermal units per hour.

- (u) One (1) natural gas-fired furnace, located in Plant #3, identified as H29, constructed in 1980, heat input capacity: 0.175 million British thermal units per hour.
- (v) One (1) natural gas-fired furnace, located in Plant #3, identified as H30, constructed in 1980, heat input capacity: 0.30 million British thermal units per hour.
- (w) Two (2) natural gas-fired furnaces, located in Plant #3, identified as H31 and H32, constructed from 1980 to 1988, heat input capacity: 0.40 million British thermal units per hour, each.
- (x) One (1) natural gas-fired furnace, located in Plant #4, identified as H33, constructed in 1996, heat input capacity: 0.045 million British thermal units per hour.
- (y) One (1) natural gas-fired furnace, located in Plant #4, identified as H34, constructed in 1999, heat input capacity: 0.120 million British thermal units per hour.
- (z) Three (3) natural gas-fired furnaces, located in Plant #4, identified as H35-H37, constructed in 1996, heat input capacity: 0.40 million British thermal units per hour, each.
- (aa) Two (2) natural gas-fired furnaces, located in Plant #4, identified as H38 and H39, constructed in 1999, heat input capacity: 0.58 million British thermal units per hour, each.
- (bb) Two (2) natural gas-fired furnaces, located in Plant #5, identified as H40 and H41, constructed in 1978, heat input capacity: 0.090 million British thermal units per hour, each.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

The source does not consist of any emission units or pollutant control equipment that have been constructed and/or have operated without a permit.

Emission Units and Pollution Control Equipment Removed From the Source

The following emission units and pollution control equipment have been removed from the source:

- (a) One (1) natural gas-fired furnace, located in Plant #6, identified as H42, constructed in 1998, heat input capacity: 0.075 million British thermal units per hour.
- (b) One (1) natural gas-fired furnace, located in Plant #6, identified as H43, constructed in 1998, heat input capacity: 0.40 million British thermal units per hour.

Existing Approvals

Since the issuance of the **MSOP 099-13721-00054** on November 28, 2001, the source has constructed or has been operating under the following approvals as well:

- (a) MSOP Notice-Only Change (NOC) 099-19124-00054, issued on June 16, 2004,
- (b) MSOP NOC 099-20204-00054, issued on November 9, 2004, and
- (c) MSOP Minor Permit Revision 099-20901-00054, issued on July 6, 2005.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been revised in this **MSOP Renewal**:

Condition D.1.2 of MPR 099-20901-00054, issued on July 6, 2005:

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from PB-1 shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

The 326 IAC 6-3 revisions that became effective on June 12, 2002 were approved into the State Implementation Plan on September 23, 2005. These rules replace the previous version of 326 IAC 6-3 (Process Operations); therefore, the requirements of the previous version of 326 IAC 6-3-2 are no longer applicable to this source. The paint booth, identified as PB1 now is required to comply with 326 IAC 6-3-2(d), which states that the facility must have dry particulate filters installed and in operation because the facility has particulate emissions greater than 0.551 pounds per hour before controls.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
SC1	Shotblaster	3.0	1.0	1,600	70
S1	Paint Booth	6.0	2.0	7,985	70
S2	Paint Booth	6.0	2.0	7,985	70
S3	Paint Booth	6.0	2.0	7,985	70
S4	Paint Booth	6.0	2.0	7,985	70

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Marshall County.

Pollutant	Status
PM ₁₀	attainment
PM _{2.5}	attainment
SO ₂	attainment
NO _x	attainment
8-hour Ozone	attainment
CO	attainment
Lead	attainment

- (a) Marshall County has been classified as unclassifiable or attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions. See the State Rule Applicability – Entire Source section.
- (b) 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 emissions and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (c) Marshall County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (e) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD or Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	160
PM ₁₀	58.7
SO ₂	0.029
VOC	4.54
CO	4.13
NO _x	4.92

HAPs	tons/year
Glycol Ethers	1.22
Ethylene Glycol	0.674
Hexane	0.088
Manganese	0.054
Chromium	0.026
Nickel	0.004
Formaldehyde	0.004
Benzene, Dichlorobenzene, Toluene, Lead, Cadmium	Less than or equal to 0.001
Total	2.07

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than one hundred (<100) tons per year. The source is not subject to the provisions of 326 IAC 2-7. The PM and PM₁₀ emissions are greater than twenty-five (25.0) tons per year. Therefore, the source will be issued an MSOP.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Actual Emissions

No previous emission data has been received from the source.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this MSOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/Emission Unit	Potential to Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
One (1) paint booth, identified as PB1	2.16	2.16	-	2.22	-	-	1.22 single (Glycol Ethers); 1.89 total
Thirty-three (33) MIG welders	20.9	20.9	-	-	-	-	0.031 single (Manganese); 0.040 total
Thirty-five (35) MIG welders	8.67	8.67	-	-	-	-	0.013 single (Manganese); 0.017 total
Three (3) oxyacetylene flame cutting stations, each with four (4) cutting heads	7.67	7.67	-	-	-	-	0.022 single (Manganese); 0.040 total
One (1) shotblaster, identified as DC1	22.7	10.6	-	-	-	-	-
One (1) tableblaster, identified as MT1800	2.41	0.373	-	-	-	-	-
One (1) portable pipeblaster, identified as 1-8-D	0.004	0.372	-	-	-	-	-
Degreasing Operations	-	-	-	2.06	-	-	-
Natural gas-fired combustion sources	0.093	0.374	0.029	0.270	4.13	4.92	0.088 single (Hexane); 0.093 total
Total	64.6	51.1	0.029	4.54	4.13	4.92	1.22 single (Glycol Ethers); 2.07 total
Major Source Threshold	250	250	250	250	250	250	-

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

- (a) The natural gas-fired combustion sources are not steam generating units. Therefore, the requirements of the New Source Performance Standard, 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, and Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, are not included in the permit.
- (b) There are no New Source Performance Standards (40 CFR 60 and 326 IAC 12-1) included in the permit for this source.
- (c) The degreasing operations do not use halogenated solvents. Therefore, the requirements of the National Emission Standard for Hazardous Air Pollutants, 40 CFR 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning, are not included in the permit.
- (d) This source is an area source for HAPs. Therefore, the requirements of the National Emission Standard for Hazardous Air Pollutants, 40 CFR 63, Subpart M, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, are not included in the permit.
- (e) The natural gas-fired combustion sources are not industrial, commercial, or institutional boilers and are also not process heaters. Therefore, the requirements of the National Emission Standard for Hazardous Air Pollutants, 40 CFR 63, Subpart D, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, are not included in the permit.
- (f) There are no National Emission Standards for Hazardous Air Pollutants (40 CFR 63) included in the permit for this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The emissions of all attainment criteria pollutants are less than two hundred fifty (250) tons per year. Therefore, this source, which is not one (1) of the twenty-eight (28) listed source categories, is a minor source pursuant to 326 IAC 2-2, PSD.

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

The operation of the entire source will emit less than ten (10.0) tons per year of an individual HAP and less than twenty-five (25.0) tons per year for a combination of all HAPs. Therefore, the requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) are not applicable.

326 IAC 2-6 (Emission Reporting)

The emissions of all criteria pollutants are below one hundred (100) tons per year, of an individual HAP are less than ten (10.0) tons per year, and of a combination of all HAPs are less than twenty-five (25.0) tons per year. Therefore, this source is not required to have a Part 70 permit under 326 IAC 2-7 and the requirements of 326 IAC 2-6, Emission Reporting, are not applicable.

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 Exemptions), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 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.

State Rule Applicability – Individual Facilities

326 IAC 6-2 (Particulate Matter Emissions for Sources of Indirect Heating)

The natural gas-fired combustion sources are not sources of indirect heating. Therefore, the requirements of 326 IAC 6-2 (Particulate Matter Emissions for Sources of Indirect Heating) are not applicable to these facilities.

326 IAC 6-3 (Particulate Emission Limitations, work practices, and control technologies)

- (a) 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 filter and the Permittee shall operate the control device in accordance with manufacturer's specifications. If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (1) Repair 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 source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.
- (b) The particulate from the natural gas-fired combustion sources and the one (1) portable pipeblaster, identified as 1-8-D, are less than 0.551 pounds per hour, each. Therefore, pursuant to 326 IAC 6-3-1(b)(14), the requirements of 326 IAC 6-3, Particulate Emission Limitations for Manufacturing Processes, are not applicable to these facilities.
- (c) Pursuant to 326 IAC 6-3-2(e), particulate from the thirty-three (33) MIG welders, identified as MIG 1 through MIG 33, the thirty-five (35) MIG welders, identified as MIG 34 through MIG 68, the three (3) oxyacetylene flame cutting stations, each with four (4) cutting heads, the one (1) shotblaster, identified as DC1, and the one (1) tableblaster, identified as MT 1800, shall be limited as described in the following table.

Emission Unit	Process Weight Rate (tons/hr)	Allowable Particulate Emissions (lbs/hr)	How will emission unit comply with 326 IAC 6-3-2?
Thirty-three (33) MIG welders, identified as MIG 1 through MIG 33	0.101, each	0.883, each	Unrestricted emissions are less than allowable.
Thirty-five (35) MIG welders, identified as MIG 34 through MIG 68	0.099, each	0.872, each	Unrestricted emissions are less than allowable.
Three (3) oxyacetylene flame cutting machines, each with four (4) cutting stations	0.016, each cutting station	0.256, each cutting station	Unrestricted emissions are less than allowable.
One (1) shotblaster, identified as DC1	1.42	5.19	Emissions are controlled by a baghouse.
One (1) tableblaster, identified as MT 1800	0.050	0.551	Emissions are controlled by a canister dust collector.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The baghouse and dust collector shall be in operation at all times the one (1) shotblaster, identified as DC1 and the one (1) tableblaster, identified as MT 1800, are in operation, in order to comply with this limit.

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

The one (1) paint booth, identified as PB1, previously had VOC emissions greater than fifteen (15) pounds per day. Pursuant to 326 IAC 8-1-1(a), even though the source has now switched to coatings which reduce the VOC emissions to below fifteen (15) pounds per day, the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating) are still applicable to the one (1) paint booth, identified as PB1.

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of the coating delivered to the applicator at the one (1) spray booth, identified as PB, shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for extreme performance coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the spray booth can comply with this requirement.

326 IAC 8-3-2 (Cold Cleaner Operation)

The two (2) cold cleaner degreasers, identified as Plant #1 and Plant #3 degreasers, were constructed in 1999 and 1998, respectively. Therefore, they are subject to 326 IAC 8-3-2, Cold Cleaner

Operation, for cold cleaning operations constructed after January 1, 1980. Pursuant to 326 IAC 8-3-2, the owner or operator shall:

- (a) equip the cleaner with a cover;
- (b) equip the cleaner with a facility for draining cleaned parts;
- (c) close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) provide a permanent, conspicuous label summarizing the operating requirements; and
- (f) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Cold cleaner degreaser operation and control)

The two (2) cold cleaner degreasers, identified as Plant #1 and Plant #3 degreasers, were constructed after July 1, 1990 and do not have remote solvent reservoirs. Therefore, pursuant to 326 IAC 8-3-1(b)(2), the requirements of 326 IAC 8-3-5 (Cold cleaner degreaser operations and control) are applicable.

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Determination and Monitoring Requirements

The Compliance Determination Requirements applicable to this source are as follows:

The one (1) shotblaster, identified as DC1, has applicable compliance determination conditions as specified below:

The baghouse and the dust collector for particulate control shall be in operation and control emissions from the one (1) shotblaster, identified as DC1, and the one (1) tableblaster, identified as MT-1800, at all times when the facilities are in operation.

The Compliance Monitoring Requirements applicable to this source are as follows:

Control	Parameter	Frequency	Range	Excursions and Exceedances
Baghouse for DC1	Water Pressure Drop	Daily	4.0 to 6.0 inches	Response Steps
	Visible Emissions	Daily	Normal-Abnormal	

These monitoring conditions are necessary because the baghouse for the one (1) shotblaster, identified as DC1 must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations).

Recommendation

The staff recommends to the Commissioner that the MSOP Renewal be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on August 25, 2006. Additional information was received on May 23 and 29, 2007 and June 11, 2007.

Conclusion

The operation of this metal tower construction source shall be subject to the conditions of the attached **MSOP Renewal No. M 099-23551-00054**.

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

**Company Name: Valmont Structures, Inc. d.b.a PiRod, Inc.
Address City IN Zip: 1200 N Oak Road, Plymouth, Indiana 46563
MSOP Renewal: M 099-23551-00054
Reviewer: Michael A. Morrone/MES
Date: June 11, 2007**

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
PB1																
DTM Wash Primer	9.40	68.40%	65.3%	3.10%	73.8%	22.10%	0.301	4.74	1.11	0.291	0.416	9.99	1.82	6.50	1.32	65%
Metalatex Semi-Gloss Acrylic Coating, Lead Free International Orange	9.09	55.70%	51.8%	3.90%	56.7%	39.10%	0.301	4.74	0.819	0.355	0.506	12.1	2.22	8.81	0.907	65%
Metalatex Semi-Gloss Acrylic Coating, Extra White	9.68	53.70%	51.1%	2.60%	59.5%	37.30%	0.301	4.74	0.621	0.252	0.359	8.62	1.57	9.80	0.675	65%

State Potential Emissions	Add worst case coating to all solvents	PM	Control Efficiency	78.0%	0.506	12.1	2.22	9.80
			Uncontrolled					
			Controlled				2.16	

METHODOLOGY

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

**Appendix A: Emission Calculations
HAP Emission Calculations**

**Company Name: Valmont Structures, Inc. d.b.a PiRod, Inc.
Address City IN Zip: 1200 N Oak Road, Plymouth, Indiana 46563
MSOP Renewal: M 099-23551-00054
Reviewer: Michael A. Morrone/MES
Date: June 11, 2007**

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Ethylene Glycol	Weight % Glycol Ethers	Ethylene Glycol Emissions (tons/yr)	Glycol Ether Emissions (tons/yr)	Total HAPs (tons/yr)
PB1								
DTM Wash Primer	9.40	0.30100	4.744	0.00%	2.00%	0.00	0.268	0.268
Metalex Semi-Gloss Acrylic Coating, Lead Free International Orange	9.09	0.30100	4.744	2.00%	2.00%	0.260	0.260	0.519
Metalex Semi-Gloss Acrylic Coating, Extra White	9.68	0.30100	4.740	3.00%	5.00%	0.414	0.691	1.10
Totals						0.674	1.22	1.89

METHODOLOGY

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

**Appendix A: Emission Calculations
Abrasive Blasting - Confined - DC1**

Company Name: Valmont Structures, Inc. d.b.a PiRod, Inc.
Address City IN Zip: 1200 N Oak Road, Plymouth, Indiana 46563
MSOP Renewal: M 099-23551-00054
Reviewer: Michael A. Morrone/MES
Date: June 11, 2007

Table 1 - Emission Factors for Abrasives

Abrasive	Emission Factor	
	lb PM / ton metal	lb PM10 / ton metal
Steel Shot	17.0	1.70

Metal processed (ton/hr) = 1.42

Uncontrolled Emissions (E, lb/hr)

	PM	PM-10
Uncontrolled Emissions =	24.1 lb/hr	2.41 lb/hr
	106 ton/yr	10.6 ton/yr
	(99% control)	(99% control)
Controlled Emissions =	0.2414 lb/hr	0.024 lb/hr
	1.06 ton/yr	0.106 ton/yr

METHODOLOGY

PM and PM10 emission factors from FIRE 6.25 using SCC code 3-04-007-11
 Lb/hr (PM) = Steel shot processed (lb/hr) X Emission factor (lb PM/lb abrasive)
 Lb/hr (PM10) = Metal processed (ton/hr) X Emission factor (lb PM10/ton metal)
 Ton/yr = lb/hr X 8760 hr/yr X ton/2000

Company Name: Valmont Structures, Inc. d.b.a PiRod, Inc.
 Address City IN Zip: 1200 N Oak Road, Plymouth, Indiana 46563
 MSOP Renewal: M 099-23551-00054
 Reviewer: Michael A. Morrone/MES
 Date: June 11, 2007

Table 1 - Emission Factors for Abrasives

Abrasive	Emission Factor	
	lb PM / ton metal	lb PM10 / ton meta
Steel Shot	17.0	1.70

Metal Processed (ton/hr) = 0.050

Uncontrolled Emissions (E, lb/hr)

	PM	PM-10
Uncontrolled Emissions =	0.850 lb/hr	0.085 lb/hr
	3.72 ton/yr	0.373 ton/yr
	(99% control)	(99% control)
Controlled Emissions =	0.009 lb/hr	0.001 lb/hr
	0.0372 ton/yr	0.004 ton/yr

METHODOLOGY

PM and PM10 emission factor from FIRE 6.25 using SCC code 3-04-007-11
 Lb/hr (PM) = Steel shot processed (lb/hr) X Emission factor (lb PM/lb abrasive)
 Lb/hr (PM10) = Metal processed (ton/hr) X Emission factor (lb PM10/ton metal)
 Ton/yr = lb/hr X 8760 hr/yr X ton/2000 l

Company Name: Valmont Structures, Inc. d.b.a PiRod, Inc.
 Address City IN Zip: 1200 N Oak Road, Plymouth, Indiana 46563
 MSOP Renewal: M 099-23551-00054
 Reviewer: Michael A. Morrone/MES
 Date: June 11, 2007

Table 1 - Emission Factors for Abrasives

Abrasive	Emission Factor	
	lb PM / ton metal	lb PM10 / ton metal
Steel Shot	17.0	1.70

Metal Processed (tons/hr) = 0.050

Uncontrolled Emissions (E, lb/hr)

	PM	PM-10
Uncontrolled Emissions =	0.850 lb/hr	0.085 lb/hr
	3.72 ton/yr	0.372 ton/yr
	(99% control)	(99% control)
Controlled Emissions =	0.009 lb/hr	0.001 lb/hr
	0.037 ton/yr	0.004 ton/yr

METHODOLOGY

PM and PM10 emission factors from FIRE 6.25 using SCC code 3-04-007-11
 Lb/hr (PM) = Steel shot processed (lb/hr) X Emission factor (lb PM/lb abrasive)
 Lb/hr (PM10) = Metal processed (ton/hr) X Emission factor (lb PM10/ton metal)
 Ton/yr = lb/hr X 8760 hr/yr X ton/2000

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

**Company Name: Valmont Structures, Inc. d.b.a PiRod, Inc.
Address City IN Zip: 1200 N Oak Road, Plymouth, Indiana 46563
MSOP Renewal: M 099-23551-00054
Reviewer: Michael A. Morrone/MES
Date: June 11, 2007**

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Metal Inert Gas (MIG)(carbon steel)	35	2.35		0.0241	0.00003		0.00001	1.98	0.003	0.000	0.001	0.004
Metal Inert Gas (MIG)(carbon steel)	33	6		0.0241	0.00003		0.00001	4.77	0.007	0.000	0.002	0.009
FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	12	3.00	5	0.162	0.0005	0.0001	0.0003	1.75	0.005	0.001	0.003	0.010
EMISSION TOTALS												
Potential Emissions lbs/hr								8.51	0.015	0.001	0.006	0.022
Potential Emissions lbs/day								204	0.358	0.026	0.145	0.529
Potential Emissions tons/year								37.3	0.065	0.005	0.026	0.097

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 r

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

**Appendix A: State Potential Emissions Calculations
Degreasing**

**Company Name: Valmont Structures, Inc. d.b.a PiRod, Inc.
Address City IN Zip: 1200 N Oak Road, Plymouth, Indiana 46563
MSOP Renewal: M 099-23551-00054
Reviewer: Michael A. Morrone/MES
Date: June 11, 2007**

Unit ID	Material	Density (lb/gal)	Weight % Volatile (H2O and organics)	Weight % Water	Weight % Organics	Gal of Mat (gal/day)	Potential VOC Emissions (lb/day)	Potential VOC Emissions (ton/yr)
Plant #1	Safety Kleen 105	6.67	100.00%	0.0%	100.0%	1.28	8.54	1.56
Plant #2	Safety Kleen 105	6.67	100.00%	0.0%	100.0%	0.41	2.73	0.499
State Potential Emissions							11.3	2.06

METHODOLOGY

Potential VOC Pounds per Day = Solvent Density (lbs/gallon) * weight % volatiles * solvent consumption (gallons/day)

Potential VOC Tons per Year = Potential VOC Pounds per Day * (365 days/yr) * (1 ton/2000 lbs)

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

Company Name: Valmont Structures, Inc. d.b.a PiRod, Inc.
Address City IN Zip: 1200 N Oak Road, Plymouth, Indiana 46563
MSOP Renewal: M 099-23551-00054
Reviewer: Michael A. Morrone/MES
Date: June 11, 2007

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

11.2

98

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	100	5.50	84.0
				**see below		
Potential Emission in tons/yr	0.093	0.374	0.029	4.92	0.270	4.13

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

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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 (SUPPLEMENT D 3/98)

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

See page 9 for HAPs emissions calculations.

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

Company Name: Valmont Structures, Inc. d.b.a PiRod, Inc.
Address City IN Zip: 1200 N Oak Road, Plymouth, Indiana 46563
MSOP Renewal: M 099-23551-00054
Reviewer: Michael A. Morrone/MES
Date: June 11, 2007

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 0.0021	Dichlorobenzene 0.001	Formaldehyde 0.075	Hexane 1.80	Toluene 0.003
Potential Emission in tons/yr	0.000103	0.0001	0.003687	0.088498	0.0002

HAPs - Metals						
Emission Factor in lb/MMcf	Lead 0.0005	Cadmium 0.001	Chromium 0.001	Manganese 0.0004	Nickel 0.0021	Total
Potential Emission in tons/yr	0.00002	0.0001	0.0001	0.00002	0.0001	0.093

Methodology is the same as page 8.

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

**Appendix A: Emissions Calculations
Summary**

**Company Name: Valmont Structures, Inc. d.b.a PiRod, Inc.
Address City IN Zip: 1200 N Oak Road, Plymouth, Indiana 46563
MSOP Renewal: M 099-23551-00054
Reviewer: Michael A. Morrone/MES
Date: June 11, 2007**

Summary of Emissions

Uncontrolled Potential Emissions

<i>Significant Emission Units</i>	PM	PM-10	SO2	NOx	VOC	CO	Ethylene Glycol	Glycol Ethers	Manganese	Nickel	Chromium	Benzene	Dichloro- benzene	Formal- dehyde	Hexane	Toluene	Lead	Cadmium	Total HAPs
	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
One (1) paint booth, identified as PB1	9.80	9.80	0.00	0.00	2.22	0.00	0.674	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.89
Thirty-three (33) MIG welders	20.9	20.9	0.00	0.00	0.00	0.00	0.00	0.00	0.031	0.00	0.009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.040
Thirty-five (35) MIG welders	8.67	8.67	0.00	0.00	0.00	0.00	0.00	0.00	0.001	0.00	0.004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.005
Three (3) oxyacetylene flame cutting stations, each with four (4) cutting heads	7.67	7.67	0.00	0.00	0.00	0.00	0.00	0.00	0.022	0.004	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.039
One (1) shotblaster, identified as DC1	106	10.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
One (1) tableblaster, identified as MT 1800	3.72	0.373	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
One (1) portable pipeblaster, identified as 1-8-D	3.72	0.372	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Degreasing Operations	0.00	0.00	0.00	0.00	2.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural gas-fired combustion	0.093	0.374	0.029	4.92	0.270	4.13	0.00	0.00	0.00002	0.0001	0.0001	0.0001	0.0001	0.004	0.088	0.0002	0.00002	0.0001	0.093
Total	160	58.7	0.029	4.92	4.54	4.13	0.67	1.22	0.054	0.004	0.026	0.0001	0.0001	0.004	0.088	0.0002	0.00002	0.0001	2.07

Company Name: Valmont Structures, Inc. d.b.a PiRod, Inc.
 Address City IN Zip: 1200 N Oak Road, Plymouth, Indiana 46563
 MSOP Renewal: M 099-23551-00054
 Reviewer: Michael A. Morrone/MES
 Date: June 11, 2007

Controlled and Limited Potential Emissions

<i>Significant Emission Units</i>	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Ethylene Glycol (tons/yr)	Glycol Ethers (tons/yr)	Manganese (tons/yr)	Nickel (tons/yr)	Chromium (tons/yr)	Benzene (tons/yr)	Dichloro- benzene (tons/yr)	Formal- dehyde (tons/yr)	Hexane (tons/yr)	Toluene (tons/yr)	Lead (tons/yr)	Cadmium (tons/yr)	Total HAPs (tons/yr)	
One (1) paint booth, identified as PB1	2.16	2.16	0.00	0.00	2.22	0.00	0.674	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.89
Thirty-three (33) MIG welders	20.9	20.9	0.00	0.00	0.00	0.00	0.00	0.00	0.031	0.00	0.009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.040
Thirty-five (35) MIG welders	8.67	8.67	0.00	0.00	0.00	0.00	0.00	0.00	0.001	0.00	0.004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.005
Three (3) oxyacetylene flame cutting stations, each with four (4) cutting heads	7.67	7.67	0.00	0.00	0.00	0.00	0.00	0.00	0.022	0.004	0.013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.039
One (1) shotblaster, identified as DC1	22.7	10.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
One (1) tableblaster, identified as MT 1800	2.41	0.373	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
One (1) portable pipeblaster, identified as 1-8-D	0.004	0.372	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Degreasing Operations	0.00	0.00	0.00	0.00	2.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Natural gas-fired combustion	0.093	0.374	0.029	4.92	0.270	4.13	0.00	0.00	0.00002	0.0001	0.0001	0.0001	0.0001	0.004	0.088	0.0002	0.00002	0.0001	0.0001	0.093
Total	64.6	51.1	0.029	4.92	4.54	4.13	0.67	1.22	0.054	0.004	0.026	0.0001	0.0001	0.004	0.088	0.0002	0.00002	0.0001	0.0001	2.07