



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: February 2, 2005  
RE: Prime PVC, Inc. / 053-17312-00053  
FROM: Paul Dubenetzky  
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 1/10/05



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## MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

**Prime PVC, Inc.  
1400 North Washington Street  
Marion, Indiana 46952**

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

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 053-17312-00053                                              |                                                                      |
| Issued by: Original signed by<br>Paul Dubenetzky, Branch Chief<br>Office of Air Quality | Issuance Date: February 2, 2005<br>Expiration Date: February 2, 2010 |

## TABLE OF CONTENTS

|            |                                                                                                                                        |    |
|------------|----------------------------------------------------------------------------------------------------------------------------------------|----|
| <b>A</b>   | <b>SOURCE SUMMARY</b> .....                                                                                                            | 4  |
| A.1        | General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]                                                                          |    |
| A.2        | Emission Units and Pollution Control Equipment Summary                                                                                 |    |
| A.3        | Part 70 Permit Applicability [326 IAC 2-7-2]                                                                                           |    |
| <b>B</b>   | <b>GENERAL CONDITIONS</b> .....                                                                                                        | 6  |
| B.1        | Permit No Defense [IC 13]                                                                                                              |    |
| B.2        | Definitions                                                                                                                            |    |
| B.3        | Effective Date of the Permit [IC 13-15-5-3]                                                                                            |    |
| B.4        | Permit Term and Renewal [326 IAC 2-6.1-7(a)] [326 IAC 2-1.1-9.5]                                                                       |    |
| B.5        | Modification to Permit [326 IAC 2]                                                                                                     |    |
| B.6        | Annual Notification [326 IAC 2-6.1-5(a)(5)]                                                                                            |    |
| B.7        | Preventive Maintenance Plan [326 IAC 1-6-3]                                                                                            |    |
| B.8        | Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]                                                                              |    |
| B.9        | 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]<br>[IC 13-17-3-2] [IC 13-30-3-1]                |    |
| B.10       | Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]                                                                             |    |
| B.11       | Annual Fee Payment [326 IAC 2-1.1-7]                                                                                                   |    |
| <b>C</b>   | <b>SOURCE OPERATION CONDITIONS</b> .....                                                                                               | 10 |
| C.1        | Particulate Emission Limitation For Processes with Process Weight Rates Less Than<br>One Hundred (100) Pounds per Hour [326 IAC 6-3-2] |    |
| C.2        | Permit Revocation [326 IAC 2-1.1-9]                                                                                                    |    |
| C.3        | Opacity [326 IAC 5-1]                                                                                                                  |    |
| C.4        | Fugitive Dust Emissions [326 IAC 6-4]                                                                                                  |    |
| C.5        | Stack Height [326 IAC 1-7]                                                                                                             |    |
| C.6        | Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]                                                        |    |
|            | <b>Testing Requirements</b>                                                                                                            |    |
| C.7        | Performance Testing [326 IAC 3-6]                                                                                                      |    |
|            | <b>Compliance Requirements [326 IAC 2-1.1-11]</b>                                                                                      |    |
| C.8        | Compliance Requirements [326 IAC 2-1.1-11]                                                                                             |    |
|            | <b>Compliance Monitoring Requirements</b>                                                                                              |    |
| C.9        | Compliance Monitoring [326 IAC 2-1.1-11]                                                                                               |    |
| C.10       | Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]                                                                                 |    |
| C.11       | Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]                                                                  |    |
| C.12       | Compliance Response Plan - Preparation and Implementation                                                                              |    |
| C.13       | Actions Related to Noncompliance Demonstrated by a Stack Test                                                                          |    |
|            | <b>Record Keeping and Reporting Requirements</b>                                                                                       |    |
| C.14       | Malfunctions Report [326 IAC 1-6-2]                                                                                                    |    |
| C.15       | General Record Keeping Requirements [326 IAC 2-6.1-5]                                                                                  |    |
| C.16       | General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]                                                    |    |
| <b>D.1</b> | <b>EMISSIONS UNIT OPERATION CONDITIONS: PVC Resin Mixing and Extruding</b> .....                                                       | 16 |
|            | <b>Emission Limitations and Standards</b>                                                                                              |    |
| D.1.1      | Particulate [326 IAC 6-3-2]                                                                                                            |    |
| D.1.2      | Preventive Maintenance Plan [326 IAC 1-6-3]                                                                                            |    |

**Compliance Determination Requirements**

D.1.3 Particulate Control

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

D.1.5 Parametric Monitoring

D.1.5 Baghouse Inspections

D.1.6 Broken or Failed Bag Detection

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

D.1.7 Record Keeping Requirements

**Annual Notification** ..... 21  
**Malfunction Report** ..... 22

## 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.2 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)]

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The Permittee owns and operates a stationary PVC resin mixing and extruding source.

|                         |                                                                                                                   |
|-------------------------|-------------------------------------------------------------------------------------------------------------------|
| Authorized Individual:  | Operations Manager                                                                                                |
| Source Address:         | 1400 North Washington Street, Marion, Indiana 46952                                                               |
| Mailing Address:        | 1400 North Washington Street, Marion, Indiana 46952                                                               |
| General Source Phone:   | (765) 651-1546                                                                                                    |
| SIC Code:               | 3087                                                                                                              |
| County Location:        | Grant                                                                                                             |
| Source Location Status: | Attainment for all criteria pollutants                                                                            |
| Source Status:          | Minor Source Operating Permit<br>Minor Source, under PSD Rules;<br>Minor Source, Section 112 of the Clean Air Act |

### A.2 Emissions Units and Pollution Control Equipment Summary

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This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) One (1) polyvinyl chloride (PVC) resin receiving operation, constructed in two (2) phases with the first phase being 1992 - 1995 and the second phase being 1995-1998, including eight (8) silos, identified as S1 through S8, each equipped with bin vent filters, and two (2) railcars, all enclosed, with capacities of 120,000 pounds of resin, each, with resin moved into and out of the silos and railcars by enclosed tubing and vacuum pumps, with a maximum throughput of 14.0 tons per hour, total (the resin can be moved into or out of the silos at a rate of 14.0 tons per hour, but the total throughput into and out of the silos cannot exceed 14.0 tons per hour, total).
- (b) One (1) PVC resin mixing operation, identified as P1, constructed in 1992, consisting of:
  - (1) Two (2) staging silos, identified as S9 and S10, with capacities of 60,000 pounds of resin, each, and maximum throughputs of 5.0 tons of resin per hour, each, and 5.0 tons per hour, total; and
  - (2) Two (2) PVC resin mixing units, equipped with a baghouse to control particulate emissions and to capture powder which is sold as a product, and exhausting to stack St1, with a capacity of 5.0 tons per hour, total.
- (c) One (1) PVC resin mixing operation, identified as P2, constructed in 1999, equipped with a baghouse to control particulate and to capture powder which is sold as a product, exhausting inside, consisting of:
  - (1) Three (3) surge hoppers and scales, with a capacity of 6,000 pounds per hour and a throughput of 5,000 pounds per hour, total; and

- (2) One (1) mixer, identified as mixer #3, with a capacity of 5,000 pounds per hour.
- (d) Four (4) PVC Extruders, identified as Extruders 3 through 6, constructed in 1992, receiving material from in-process totes, with capacities of 1,200 pounds per hour, each.
- (e) Natural gas-fired combustion heating units (no boilers), heat input capacity: 1.7 million British thermal units per hour, total.
- (f) Twelve (12) vertical fixed-roof dome tanks identified as T1 through T12, each with a diameter of 10 feet and volume of 8,000 gallons, containing PVC modifiers/ stabilizers of a maximum true vapor pressure of  $1.16 \times 10^{-7}$  pounds per square inch (PSI) at 680°F, and an annual throughput of 576,380 gallons per year, total.
- (g) Cutting torches, cutting less than 1.5 inches per hour of stock 1-inch thick or less, total.
- (h) Welding equipment, using less than 265 pounds per day of weld wire or rod per day, total.
- (i) Four (4) finished PVC compound storage silos, filled by enclosed pipe, constructed in 2004, identified as S11 through S14, with capacities of 60,000 pounds, each, and throughputs of 5,000 pounds per hour, each, and 5,000 pounds per hour, total.
- (j) One (1) PVC extruder, identified as Extruder 2, constructed in 2004, receiving material from in-process totes, with a capacity of 4,000 pounds per hour.
- (k) One (1) PVC extruder, constructed in 1999, identified as Extruder 1, receiving material from in-process totes, with a capacity of 1,200 pounds per hour.

**SECTION B GENERAL CONDITIONS**

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

**B.1 Permit No Defense [IC 13]**

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This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

**B.2 Definitions**

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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.3 Effective Date of the Permit [IC13-15-5-3]**

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Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

**B.4 Permit Term and Renewal [326 IAC 2-6.1-7(a)] [326 IAC 2-1.1-9.5]**

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This permit 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 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

**B.5 Modification to Permit [326 IAC 2]**

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All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

**B.6 Annual Notification [326 IAC 2-6.1-5(a)(5)]**

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- (a) Annual notification shall be submitted 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) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and 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, P.O. Box 6015  
Indianapolis, IN 46206-6015

- (d) 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.7 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days (this time frame is determined on a case by case basis but no more than ninety (90) days) after issuance of this permit, including the following information on each emissions unit:
- (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.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMP's 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 PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) 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 requirements of 326 IAC 1-6-3 for that unit.

B.8 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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

- (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)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a non-road engine, as defined in 40 CFR 89.2.

**B.9 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]**

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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 this title or the conditions of this permit or any operating permit revisions;
- (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 processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (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.10 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]**  
Pursuant to [326 IAC 2-6.1-6(d)(3)]:

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- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

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

B.11 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.
- (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.

**SECTION C**

**SOURCE OPERATION CONDITIONS**

Entire Source

**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 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 non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**C.4 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.5 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 by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

C.6 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 260 linear feet on pipes or 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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

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 2-7-1(34).

- (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 applicable 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 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

#### C.7 Performance Testing [326 IAC 3-6]

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- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. 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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual date.
- (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 the 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.8 Compliance Requirements [326 IAC 2-1.1-11]

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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

#### C.9 Compliance Monitoring [326 IAC 2-1.1-11]

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

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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.11 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]

- (a) Whenever a condition in this permit requires the measurement of total static pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( 2%) of full scale reading.
- (b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

C.12 Compliance Response Plan - Preparation and Implementation

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ, upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
  - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
  - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.

- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

**C.13 Actions Related to Noncompliance Demonstrated by a Stack Test**

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- (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 emissions unit 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 re-testing in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the re-testing deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to non-compliant stack tests.

The response action documents submitted pursuant to this condition do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

**Record Keeping and Reporting Requirements**

**C.14 Malfunctions Report [326 IAC 1-6-2]**

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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.15 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 when operation begins.

C.16 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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (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, any semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. 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 EMISSIONS UNITS OPERATION CONDITIONS

### Emissions Unit Description:

- (a) One (1) polyvinyl chloride (PVC) resin receiving operation, constructed in two (2) phases with the first phase being 1992 - 1995 and the second phase being 1995-1998, including eight (8) silos, identified as S1 through S8, each equipped with bin vent filters, and two (2) railcars, all enclosed, with capacities of 120,000 pounds of resin, each, with resin moved into and out of the silos and railcars by enclosed tubing and vacuum pumps, with a maximum throughput of 14.0 tons per hour, total (the resin can be moved into or out of the silos at a rate of 14.0 tons per hour, but the total throughput into and out of the silos cannot exceed 14.0 tons per hour, total).
- (b) One (1) PVC resin mixing operation, identified as P1, constructed in 1992, consisting of:
  - (1) Two (2) staging silos, identified as S9 and S10, with capacities of 60,000 pounds of resin, each, and maximum throughputs of 5.0 tons of resin per hour, each, and 5.0 tons per hour, total; and
  - (2) Two (2) PVC resin mixing units, equipped with a baghouse to control particulate emissions and to capture powder which is sold as a product, and exhausting to stack St1, with a capacity of 5.0 tons per hour, total.
- (c) One (1) PVC resin mixing operation, identified as P2, constructed in 1999, equipped with a baghouse to control particulate and to capture powder which is sold as a product, exhausting inside, consisting of:
  - (1) Three (3) surge hoppers and scales, with a capacity of 6,000 pounds per hour and a throughput of 5,000 pounds per hour, total; and
  - (2) One (1) mixer, identified as mixer #3, with a capacity of 5,000 pounds per hour.
- (d) Four (4) PVC Extruders, identified as Extruders 3 through 6, constructed in 1992, receiving material from in-process totes, with capacities of 1,200 pounds per hour, each.
- (e) Natural gas-fired combustion heating units (no boilers), heat input capacity: 1.7 million British thermal units per hour, total.
- (f) Twelve (12) vertical fixed-roof dome tanks identified as T1 through T12, each with a diameter of 10 feet and volume of 8,000 gallons, containing PVC modifiers/ stabilizers of a maximum true vapor pressure of  $1.16 \times 10^{-7}$  pounds per square inch (PSI) at 680°F, and an annual throughput of 576,380 gallons per year, total.
- (g) Cutting torches, cutting less than 1.5 inches per hour of stock 1-inch thick or less, total.
- (h) Welding equipment, using less than 265 pounds per day of weld wire or rod per day, total.
- (i) Four (4) finished PVC compound storage silos, filled by enclosed pipe, constructed in 2004, identified as S11 through S14, with capacities of 60,000 pounds, each, and throughputs of 5,000 pounds per hour, each, and 5,000 pounds per hour, total.
- (j) One (1) PVC extruder, identified as Extruder 2, constructed in 2004, receiving material from in-process totes, with a capacity of 4,000 pounds per hour.
- (k) One (1) PVC extruder, constructed in 1999, identified as Extruder 1, receiving material from in-process totes, with a capacity of 1,200 pounds 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

### D.1.1 Particulate [326 IAC 6-3-2]

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- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the resin receiving operations shall not exceed 24.0 pounds per hour, when operating at a process weight rate of 14.0 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) PVC resin mixing operation, identified as P1, shall not exceed 12.1 pounds per hour, when operating at a process weight rate of 5.0 tons per hour.
- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) PVC resin mixing operation, identified as P2, shall not exceed 7.58 pounds per hour, when operating at a process weight rate of 2.5 tons per hour.
- (d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the receiving silos (S1 through S8) shall not exceed 24.0 pounds per hour, total, when operating at a process weight rate of 14.0 tons per hour, total.
- (e) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the two (2) staging silos (S9 and S10) shall not exceed 12.1 pounds per hour, total, when operating at a process weight rate of 5.0 tons per hour, total.
- (f) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each of the storage silos (S11 through S14) shall not exceed 7.58 pounds per hour, when operating at a process weight rate of 2.5 tons per hour.

The pounds per hour limitations were calculated with the following equation:

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

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

### D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the two (2) PVC resin mixing operations, P1 and P2, and their control devices, and the resin receiving operations and the bin vent filters on the receiving silos.

## Compliance Determination Requirements

### D.1.3 Particulate Control

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- (a) In order to comply with Condition D.1.1 and in order to remain integral to the operation, the baghouse for particulate control shall be in operation and control emissions from the PVC resin mixing operation, identified as P1, at all times that the PVC resin mixing operation, identified as P1, is in operation.

- (b) In order to comply with Condition D.1.1 and in order to remain integral to the operation, the baghouse for particulate control shall be in operation and control emissions from the PVC resin mixing operation, identified as P2, at all times that the PVC resin mixing operation, identified as P2, is in operation.
- (c) In order to comply with Condition D.1.1, the bin vent filters for particulate control shall be in operation and control emissions from the resin receiving silos at all times when the resin receiving is in operation.

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

#### **D.1.4 Visible Emissions Notations**

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- (a) Visible emission notations of the PVC resin mixing (P1 and P2) exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere, and visible emission notations of the resin receiving silo exhausts shall be performed once per shift during normal daylight operations when the resin receiving is in operation. 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) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

#### **D.1.5 Parametric Monitoring**

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The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the PVC resin mixing operations (P1 and P2), at least once per shift when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2 and 6 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation and Implementation. 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 - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other 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.1.6 Baghouse Inspections**

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An inspection shall be performed each calendar quarter of all bags controlling the two (2) PVC resin mixing operations (P1 and P2) when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall

be replaced.

#### D.1.7 Broken or Failed Bag Detection

---

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 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.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

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

##### D.1.8 Record Keeping Requirements

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- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of visible emission notations of the PVC resin mixing operations (P1 and P2) exhausts once per shift when venting to the atmosphere, and records of visible emission notations of the resin receiving silo exhausts once per shift when the resin receiving is in operation.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain the following:
  - (1) Records of the total static pressure drop during normal operation once per shift when venting to the atmosphere.
  - (2) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.1.6, the Permittee shall maintain records of the results of the inspections required under Condition D.1.6 and the dates the vents are redirected.
- (d) To document compliance with Condition D.1.2, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**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).

|                      |                                     |
|----------------------|-------------------------------------|
| <b>Company Name:</b> | <b>Prime PVC, Inc.</b>              |
| <b>Address:</b>      | <b>1400 North Washington Street</b> |
| <b>City:</b>         | <b>Marion</b>                       |
| <b>Phone #:</b>      | <b>(765) 651-1546</b>               |
| <b>MSOP #:</b>       | <b>053-17312-00053</b>              |

I hereby certify that Prime PVC, Inc. is  still in operation.  
 no longer in operation.

I hereby certify that Prime PVC, Inc. is  in compliance with the requirements of MSOP 053-17312-00053.  
 not in compliance with the requirements of MSOP 053-17312-00053.

|                                       |
|---------------------------------------|
| <b>Authorized Individual (typed):</b> |
| <b>Title:</b>                         |
| <b>Signature:</b>                     |
| <b>Date:</b>                          |

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.

|                       |
|-----------------------|
| <b>Noncompliance:</b> |
|                       |
|                       |
|                       |
|                       |

**MALFUNCTION REPORT**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
FAX NUMBER - 317 233-5967**

**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 PERM 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: \_\_\_\_/\_\_\_\_/19\_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/19\_\_\_\_ 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:

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**Indiana Department of Environmental Management  
Office of Air Quality**

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

**Source Background and Description**

|                              |                                                            |
|------------------------------|------------------------------------------------------------|
| <b>Source Name:</b>          | <b>Prime PVC, Inc.</b>                                     |
| <b>Source Location:</b>      | <b>1400 North Washington Street, Marion, Indiana 46952</b> |
| <b>County:</b>               | <b>Grant</b>                                               |
| <b>SIC Code:</b>             | <b>3087</b>                                                |
| <b>Operation Permit No.:</b> | <b>053-17312-00053</b>                                     |
| <b>Permit Reviewer:</b>      | <b>CarrieAnn Paukowits</b>                                 |

The Office of Air Quality (OAQ) has reviewed an application from Prime PVC, Inc. relating to the operation of a PVC resin mixing and extruding source. The source was issued a FESOP, F 053-7993-00053, on September 29, 1997. Due to the removal of some equipment at the source and the justification that some control devices are integral to the process, the applicant is requesting a Minor Source Operating Permit (MSOP) rather than a FESOP Renewal.

**Permitted Emission Units and Pollution Control Equipment**

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

- (a) One (1) polyvinyl chloride (PVC) resin receiving operation, constructed in two (2) phases with the first phase being 1992 - 1995 and the second phase being 1995-1998, including eight (8) silos, identified as S1 through S8, each equipped with bin vent filters, and two (2) railcars, all enclosed, with capacities of 120,000 pounds of resin, each, with resin moved into and out of the silos and railcars by enclosed tubing and vacuum pumps, with a maximum throughput of 14.0 tons per hour, total (the resin can be moved into or out of the silos at a rate of 14.0 tons per hour, but the total throughput into and out of the silos cannot exceed 14.0 tons per hour, total).
- (b) One (1) PVC resin mixing operation, identified as P1, constructed in 1992, consisting of:
  - (1) Two (2) staging silos, identified as S9 and S10, with capacities of 60,000 pounds of resin, each, and maximum throughputs of 5.0 tons of resin per hour, each, and 5.0 tons per hour, total; and
  - (2) Two (2) PVC resin mixing units, equipped with a baghouse to control particulate emissions and to capture powder which is sold as a product, and exhausting to stack St1, with a capacity of 5.0 tons per hour, total.
- (c) One (1) PVC resin mixing operation, identified as P2, constructed in 1999, equipped with a baghouse to control particulate and to capture powder which is sold as a product, exhausting inside, consisting of:
  - (1) Three (3) surge hoppers and scales, with a capacity of 6,000 pounds per hour and a throughput of 5,000 pounds per hour, total; and
  - (2) One (1) mixer, identified as mixer #3, with a capacity of 5,000 pounds per hour.

- (d) Four (4) PVC Extruders, identified as Extruders 3 through 6, constructed in 1992, receiving material from in-process totes, with capacities of 1,200 pounds per hour, each.
- (e) Natural gas-fired combustion heating units (no boilers), heat input capacity: 1.7 million British thermal units per hour, total.
- (f) Twelve (12) vertical fixed-roof dome tanks identified as T1 through T12, each with a diameter of 10 feet and volume of 8,000 gallons, containing PVC modifiers/ stabilizers of a maximum true vapor pressure of  $1.16 \times 10^{-7}$  pounds per square inch (PSI) at 680°F, and an annual throughput of 576,380 gallons per year, total.
- (g) Cutting torches, cutting less than 1.5 inches per hour of stock 1-inch thick or less, total.
- (h) Welding equipment, using less than 265 pounds per day of weld wire or rod per day, total.

### **Unpermitted Emission Units and Pollution Control Equipment**

The source also consists of the following unpermitted emission units:

- (i) Four (4) finished PVC compound storage silos, filled by enclosed pipe, constructed in 2004, identified as S11 through S14, with capacities of 60,000 pounds, each, and throughputs of 5,000 pounds per hour, each, and 5,000 pounds per hour, total.
- (j) One (1) PVC extruder, identified as Extruder 2, constructed in 2004, receiving material from in-process totes, with a capacity of 4,000 pounds per hour.
- (k) One (1) PVC extruder, constructed in 1999, identified as Extruder 1, receiving material from in-process totes, with a capacity of 1,200 pounds per hour.

These unpermitted facilities did not require construction approval because the emissions are less than that which require a Minor Permit Revision pursuant to 326 IAC 2-8-11.1. The potential particulate emissions from the storage silos are based on the total throughput capacity of 5,000 pounds per hour, which results in emissions of 2.19 tons per year, total.

### **New Emission Units and Pollution Control Equipment**

There are no new proposed emission units during this review.

### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

- (a) FESOP 053-7993-00053 issued on September 29, 1997, with an expiration date of September 29, 2003; and
- (b) First Significant FESOP Revision 053-10315-00053, issued on February 9, 1999.

All conditions from previous approvals were incorporated into this permit except the following:

- (a) Condition D.2.1 of FESOP 053-7993-00053, which states:

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emission Limitations for Sources of Indirect Heating), the PM emissions from the three (3) 0.13 million Btu per hour heat input boilers shall be limited to 1.4 pounds per million Btu heat input. This limitation is based on the following equation yielding the lowest limit, because the industry cannot identify the installation date other than prior to 1985: 326 IAC 6-2-4:  $Pt = 1.09/Q^{0.26}$

Reason not incorporated: The boilers have been removed from this source.

- (b) Condition D.2.3 of First Significant FESOP Revision 053-10315-00053, which states, "Pursuant to 326 IAC 8-9-6 (Volatile Organic Liquid Storage Vessels: Record Keeping and Reporting Requirements),
- (1) The owner or operator of each tank ( $T_1$  through  $T_{12}$ ) subject to this rule shall keep all records required for three (3) years unless specified otherwise. Records required by subsection (b) shall be maintained for the life of the tanks.
  - (2) The owner or operator of each tank ( $T_1$  through  $T_{12}$ ) shall maintain a record and submit to the department a report containing the following information for each tank:
    - (A) The tank identification number
    - (B) The tank dimensions
    - (C) The tank capacity

Reason not incorporated: This source is not located in Clark, Floyd, Lake, or Porter County. Therefore, the requirements of 326 IAC 8-9 are not applicable.

- (c) All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

- (d) All FESOP conditions.

Reason not incorporated: The source transitioned to a Minor Source Operating Permit; therefore, the FESOP limits are no longer applicable.

The following conditions from previous approvals have been revised in this permit:

- (a) Condition D.1.1 of FESOP 053-7993-00053, which states "Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the PVC resin mixing facilities, P1, shall not exceed 10.9 pounds per hour when operating at a process weight rate of 8603 pounds per hour."

Reason revised: The capacity of the PVC resin mixing operation, identified as P1, is 5.0 tons per hour, not 8,603 pounds per hour.

- 
- (b) Condition D.3.6 of First Significant FESOP Revision 053-10315-00053, which states, "Pursuant to 326 IAC 6-3 (Process Operations), the following facilities shall not exceed the following associated particulate matter (PM) emissions:

| Process/ Facility                                          | Stack ID.                             | Throughput Limits (tons/hour) | PM /PM <sub>10</sub> Emission Limits (lb./hr) |
|------------------------------------------------------------|---------------------------------------|-------------------------------|-----------------------------------------------|
| Unloading and Conveying to receiving silos (S4 through S7) | S <sub>4</sub> through S <sub>7</sub> | 60.0                          | 46.30                                         |
| Mixing & Weighing System (P3)                              |                                       |                               |                                               |
| Mixer # 1                                                  | S <sub>3</sub>                        | 3.0                           | 8.56                                          |
| Mixer # 2                                                  | S <sub>3</sub>                        | 3.0                           | 8.56                                          |
| Mixer # 3                                                  | S <sub>3</sub>                        | 3.0                           | 8.56                                          |
| Surge Hopper System                                        |                                       |                               |                                               |
| Surge Hopper # S8                                          | S <sub>8</sub>                        | 3.0                           | 8.56                                          |
| Surge Hopper # S9                                          | S <sub>9</sub>                        | 3.0                           | 8.56                                          |
| Surge Hopper # S10                                         | S <sub>10</sub>                       | 3.0                           | 8.56                                          |
| Polymer Extruders                                          |                                       |                               |                                               |
| Tote Transfer & Extruder # CM-92C                          | S <sub>11</sub>                       | 3.0                           | 8.56                                          |
| Tote Transfer & Extruder # CM-92D                          | S <sub>12</sub>                       | 3.0                           | 8.56                                          |
| Tote Transfer & Extruder # CM-92E                          | S <sub>13</sub>                       | 3.0                           | 8.56                                          |

Reason revised: The requirements of 326 IAC 6-3 are not applicable to the polymer extruders because the potential particulate emissions from those facilities are less than 0.551 pounds per hour (see "326 IAC 6-3-2" in the State Rule Applicability - Individual Facilities section of this document). The limits for the mixers and receiving are revised in this permit based on the corrected capacities. In addition, there are only two (2) mixing operations at this source, and the surge hoppers are part of the mixing process (P2).

- (c) Condition D.3.7 of First Significant FESOP Revision 053-10315-00053, which states, "A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the facilities identified as one (1) resin receiving operation, PVC mixing operation, three (3) surge hoppers and their respective baghouses identified as C4 through C7, Mac filter C3, C8 through C10."

Reason revised: A Preventive Maintenance Plan is still required for the PVC resin mixing operations and the receiving operations. The surge hoppers are part of the resin mixing operations and exhaust to the same baghouse. Therefore they should be included in the Preventive Maintenance Plan for the resin mixing operations. Many of the baghouses mentioned do not exist at this source and are not required for compliance with any rules.

- (d) Condition D.3.7 of First Significant FESOP Revision 053-10315-00053, which states, "The baghouses identified as C3, C4 through C7, C8 through C10, C11 through C13 for PM control shall be in operation at all times when the facilities identified as resin receiving operation, polymers mixing operation, surge hoppers, and tote transfers & extruders are in operation and exhausting to the outside atmosphere."

And

Condition D.3.8 of First Significant FESOP Revision 053-10315-00053, which states, "Daily visible emission notations of the facilities identified as resin receiving operation, and polymers mixing operation stack exhaust (S3, S4 through S7) shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. 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. 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. 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. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed."

And

Condition D.3.9 of First Significant FESOP Revision 053-10315-00053, which states, "The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the facilities identified as resin receiving operation, polymers mixing operation, surge hoppers, and tote transfers & extruders, at least once weekly when the respective facility is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 0.0 and 15.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading."

Reason revised: Only the mixing operations are equipped with baghouses. The other baghouses do not exist at this source and are not required for compliance with any rules. Most of the silos are equipped with bin vent filters. The bin vent filters on the receiving silos are required for compliance with 326 IAC 6-3-2.

### **Air Pollution Control Justification as an Integral Part of the Process**

The company has submitted the following justification such that the baghouses on the mixers be considered as an integral part of the mixing processes:

Although the baghouses are used to control particulate emissions, they are primarily used to capture powder. The powder is important to Prime PVC, Inc.'s bottom line because it is sold as a product. They sell approximately 10,000 pounds per month of baghouse powder. This product contributes to the income of the source. Thus, the control devices have serve a primary purpose other than controlling emissions.

IDEM, OAQ has evaluated the justifications and agreed that the baghouses will be considered as an integral part of the mixing processes. Therefore, the permitting level will be determined using the potential to emit after control by the baghouses. Operating conditions in the proposed permit will specify that these baghouses shall operate at all times when the mixers are in operation.

### Enforcement Issue

- (a) On July 15, 2003, IDEM, OAQ, signed an agreed order for Case No. 2003-12876-A, as a result of the following violation: The source did not apply for a renewal in a timely manner, as required by Condition B.17 of their FESOP and 326 IAC 2-8-3(h). The FESOP for the source expired on September 29, 2002.
- (b) During an inspection on August 31, 2004, the source was found to be in violation of Condition D.1.4 of FESOP 053-7993-00053 issued on September 29, 1997, which requires daily visible emissions notations of the resin mixing stack (St1). A violation letter will be sent.

### Recommendation

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

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

A FESOP Renewal application for the purposes of this review was received on May 19, 2003. Additional information was received on October 12 and 27 as well as November 11 and December 8, 2004. The information received on November 11, 2004, requested a transition to a Minor Source Operating Permit (MSOP).

### Emission Calculations

- (a) The particulate emissions from dropping materials from the mixers to the totes and from the totes to the extrudes are calculated using the following equation for aggregate dropping:  
$$E = k \times 0.0032 \times (U/5)^{1.3} / (M/2)^{1.4}$$
where E is the emission factor in pounds per ton, k is a constant, U is the mean wind speed and M is the moisture content. The process is completely inside and the materials are only dropped a short distance. Therefore, there is negligible wind and E is negligible. Therefore, the particulate emissions from this process are also negligible.
- (b) The VOC emissions from the storage tanks, identified as T1 through T12, are negligible based on the TSD for the First Significant FESOP Revision 053-10315-00053, issued on February 9, 1999.
- (c) See Appendix A of this document for detailed emission calculations for all other processes (4 pages).

### Potential to Emit of the Source Before Controls (after integral controls)

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

| Pollutant        | Potential to Emit (tons/yr) |
|------------------|-----------------------------|
| PM               | 193                         |
| PM <sub>10</sub> | 97.6                        |
| SO <sub>2</sub>  | 0.004                       |
| VOC              | 21.9                        |
| CO               | 0.625                       |
| NO <sub>x</sub>  | 0.745                       |

| HAPs            | Potential to Emit (tons/yr) |
|-----------------|-----------------------------|
| Benzene         | 0.00002                     |
| Dichlorobenzene | 0.00001                     |
| Formaldehyde    | 0.00056                     |
| Hexane          | 0.013                       |
| Toluene         | 0.00003                     |
| Lead            | 0.000004                    |
| Cadmium         | 0.00001                     |
| Chromium        | 0.00001                     |
| Manganese       | 0.532                       |
| Nickel          | 0.00002                     |
| Total           | 0.546                       |

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM and PM<sub>10</sub> is greater than 25 tons per year and the potential to emit of PM<sub>10</sub> is less than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.
- (b) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

**County Attainment Status**

The source is located in Grant County.

| Pollutant        | Status     |
|------------------|------------|
| PM <sub>10</sub> | attainment |
| SO <sub>2</sub>  | attainment |
| NO <sub>2</sub>  | attainment |
| 1-Hour Ozone     | attainment |
| 8-Hour Ozone     | attainment |
| CO               | attainment |
| Lead             | attainment |

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Grant County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Grant 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 for the source section.
- (c) Fugitive Emissions  
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

**Source Status**

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

| Pollutant        | Emissions (tons/yr) |
|------------------|---------------------|
| PM               | 4.0                 |
| PM <sub>10</sub> | 4.0                 |
| SO <sub>2</sub>  | Negligible          |
| VOC              | 39.44               |
| CO               | 0.1                 |
| NO <sub>x</sub>  | 0.2                 |

| Pollutant        | Emissions (tons/yr) |
|------------------|---------------------|
| Single HAP       | 0.93                |
| Combination HAPs | 0.93                |

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.
- (b) Emissions were based on the Technical Support Document for the First Significant FESOP Revision 053-10315-00053, issued on February 9, 1999.

### Part 70 Permit Determination

#### 326 IAC 2-7 (Part 70 Permit Program)

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

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

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

### Federal Rule Applicability

- (a) This source is a compounding source that processes, but does not manufacture polypropylene resins. Therefore, the requirements of 40 CFR 60, Subpart DDD, Standards of Performance for VOC Emissions from the Polymer Manufacturing Industry, are not included in the permit for this source.
- (b) The twelve (12) insignificant vertical fixed-roof dome tanks, identified as T1 through T12, have capacities less than 75 cubic meters. Therefore, the requirements of 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels, are not included in the permit for this source.
- (c) This source does not process or manufacture an elastomer product as defined by 40 CFR 63.482. Therefore, the requirements of 40 CFR 63, Subpart U, National Emission Standards For Hazardous Air Pollutant Emissions: Group I Polymers and Resins, are not included in the permit for this source.
- (d) This source does not process or manufacture a thermoplastic product as defined by 40 CFR 63.1312. Therefore, the requirements of 40 CFR 63, Subpart JJJ, National Emission Standards For Hazardous Air Pollutant Emissions: Group IV Polymers and Resins, are not included in the permit for this source.
- (e) This source is a resin compounding source. The source does not produce plastic composites, and is not a major source of HAPs. Therefore, the requirements of 40 CFR

63.5780, Subpart WWWW, National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production, are not included in the permit for this source.

- (f) Polyvinyl Chloride (PVC) is not polymerized at this source. Therefore, the requirements of 40 CFR 61.60, Subpart F, National Emission Standard for Vinyl Chloride, and 40 CFR 63.210, Subpart J, National Emission Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production are not included in the permit for this source.

### **State Rule Applicability – Entire Source**

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

The unrestricted potential emissions of each criteria pollutant are less than 250 tons per year from this source, which was constructed in Grant County after August 7, 1977, and is not in one (1) of the twenty-eight (28) listed source categories. Therefore, the requirements of 326 IAC 2-2 are not applicable.

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

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

#### 326 IAC 2-6 (Emission Reporting)

This source is not located in Lake or Porter County with the potential to emit greater than twenty-five (25) tons per year of NO<sub>x</sub>, does not emit five (5) tons per year or more of lead and does not require a Part 70 Operating Permit. Therefore, the requirements of 326 IAC 2-6 do not apply.

#### 326 IAC 5-1 (Opacity Limitations)

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

- (a) Opacity shall not exceed an average of 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 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) Pursuant to 326 IAC 6-3-2, the particulate from the resin receiving operations shall not exceed 24.0 pounds per hour, when operating at a process weight rate of 14.0 tons per hour. The potential to emit after control by the bin vent filters is 0.042 pounds per hour. Therefore, the resin receiving operations comply with this rule. The bin vent filters must be in operation and control emissions from the silos used in the receiving operations at all times when the resin receiving is in operation in order to comply with this rule.

- (b) Pursuant to 326 IAC 6-3-2, the particulate from the one (1) PVC resin mixing operation, identified as P1, shall not exceed 12.1 pounds per hour, when operating at a process weight rate of 5.0 tons per hour. The potential to emit after control by the baghouse is 0.070 pounds per hour. Therefore, the one (1) PVC resin mixing operation, identified as P1, complies with this rule. The baghouse must be in operation and control emissions from the mixing operation at all times when the facility is in operation in order to comply with this rule.
- (c) Pursuant to 326 IAC 6-3-2, the particulate from the one (1) PVC resin mixing operation, identified as P2, shall not exceed 7.58 pounds per hour, when operating at a process weight rate of 2.5 tons per hour. The potential to emit after control by the baghouse is 0.035 pounds per hour. Therefore, the one (1) PVC resin mixing operation, identified as P2, complies with this rule. The baghouse must be in operation and control emissions from the mixing operation at all times when the facility is in operation in order to comply with this rule.
- (d) Pursuant to 326 IAC 6-3-2, the particulate from each of the receiving silos (S1 through S8), shall not exceed 24.0 pounds per hour, total, when operating at a process weight rate of 14.0 tons per hour, total. The maximum potential to emit particulate from the total of all receiving silos is only 0.042 pound per hour before controls, and that occurs during receiving. Therefore, the receiving silos comply with this rule.
- (e) Pursuant to 326 IAC 6-3-2, the particulate from each of the two (2) staging silos (S9 and S10), shall not exceed 12.1 pounds per hour, total, when operating at a process weight rate of 5.0 tons per hour, total. The potential to emit particulate from the total of the two (2) staging silos is only 1.00 pound per hour before controls. Therefore, the staging silos comply with this rule.
- (f) Pursuant to 326 IAC 6-3-2, the particulate from each of the storage silos (S11 through S14), shall not exceed 7.58 pounds per hour, when operating at a process weight rate of 2.5 tons per hour. The potential to emit particulate from the total of the four (4) storage silos is 0.50 pounds per hour before controls. Therefore, the storage silos comply with this rule.
- (g) The potential particulate emissions from the material dropping to the extruders are less than 0.551 pounds per hour. Therefore, pursuant to 326 IAC 6-3-1(b) (14), the extruders are exempt from the requirements of 326 IAC 6-3.
- (h) The welding operations consume less than 625 pounds of weld wire or rod per day. Therefore, pursuant to 326 IAC 6-3-1(b) (9), the welding operations are exempt from the requirements of 326 IAC 6-3.
- (i) The torch cutting operations cut less than 3,400 inches per hour of stock 1 inch thick or less. Therefore, the torch cutting is exempt from the requirements of 326 IAC 6-3.

The limitations in (a) through (f), above, are based upon the following:

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:

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

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

The potential VOC emissions from each extruder are less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.

326 IAC 8-6-1 (Organic Solvent Emission Limitations)

This source commenced operation after January 1, 1980. Therefore, the requirements of 326 IAC 8-6-1 are not applicable.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

This source is not located in Clark, Floyd, Lake, or Porter County. Therefore, the requirements of 326 IAC 8-9 are not applicable.

**Compliance Monitoring**

The compliance monitoring requirements applicable to this source are as follows:

- (a) Although the baghouses for the PVC resin mixing operations are considered integral, compliance monitoring is required in order to ensure continuous compliance with 326 IAC 6-3-2. The two (2) PVC resin mixing operations, identified as P1 and P2, have applicable compliance monitoring conditions as specified below:
  - (1) Visible emission notations of the PVC resin mixing (P1 and P2) exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. 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. 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. 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. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.
  - (2) The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the PVC resin mixing operations (P1 and P2), at least once per shift when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2 and 6 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation and Implementation. 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 - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit. The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifi-

cations, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

- (3) An inspection shall be performed each calendar quarter of all bags controlling the two (2) PVC resin mixing operations (P1 and P2) when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
- (4) In the event that bag failure has been observed:
  - (A) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 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.
  - (B) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

These monitoring conditions are necessary because the baghouses for the PVC resin mixing operations must operate properly to ensure compliance with 326 IAC 6-3-2.

- (b) The resin receiving operations have applicable compliance monitoring conditions as specified below:

Visible emission notations of the receiving silo exhausts shall be performed once per shift during normal daylight operations when resin receiving is in operation. A trained employee shall record whether emissions are normal or abnormal. 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. 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. 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. The Compliance Response Plan for this unit shall contain trouble-

shooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a deviation from this permit.

These monitoring conditions are necessary because the bin vent filters for the resin receiving operations must operate properly to ensure compliance with 326 IAC 6-3-2.

**Conclusion**

The operation of this PVC resin mixing and extruding source shall be subject to the conditions of the Minor Source Operating Permit 053-17312-00053.

Appendix A: Emission Calculations

Company Name: Prime PVC, Inc.  
 Address City IN Zip: 1400 North Washington St., Marion, Indiana 46952  
 Permit Number: 053-17312  
 Plant ID: 053-00054  
 Reviewer: CarrieAnn Paukowitz  
 Date: May 19, 2003

| Process                    | SCC         | Throughput in tons/hr | Emission Factors in lbs/ton of Product |      |     | Potential emissions (lbs/hr) |              |             | Potential emissions (tons/year) |             |             | C.E. for PM and PM10 | Controlled Emissions in lbs/hr |              | Controlled Emissions in tons/year |             |
|----------------------------|-------------|-----------------------|----------------------------------------|------|-----|------------------------------|--------------|-------------|---------------------------------|-------------|-------------|----------------------|--------------------------------|--------------|-----------------------------------|-------------|
|                            |             |                       | PM                                     | PM10 | VOC | PM                           | PM10         | VOC         | PM                              | PM10        | VOC         |                      | PM                             | PM10         | PM                                | PM10        |
| Resin Receiving (S1 - S8)  | 3-05-012-21 | 14.00                 | 3                                      | 1.5  | 0   | 42.0                         | 21.00        | 0.000       | 184.0                           | 92.0        | 0.00        | 99.9%                | 0.042                          | 0.021        | 0.184                             | 0.092       |
| Storage Silos (S11 - S14)  | 3-05-012-22 | 2.50                  | 0.2                                    | 0.1  | 0   | 0.50                         | 0.25         | 0.00        | 2.19                            | 1.10        | 0.00        | 0.0%                 | 0.500                          | 0.250        | 2.190                             | 1.095       |
| Staging Silos (S9 and S10) | 3-05-012-22 | 5.00                  | 0.2                                    | 0.1  | 0   | 1.00                         | 0.50         | 0.00        | 4.38                            | 2.19        | 0.00        | 0.0%                 | 1.000                          | 0.500        | 4.380                             | 2.190       |
| Extruder 1                 | -----       | 0.60                  | 0                                      | 0    | 1   | 0.000                        | 0.000        | 0.600       | 0.00                            | 0.00        | 2.63        | 0.0%                 | 0.000                          | 0.000        | 0.000                             | 0.000       |
| Extruder 2                 | -----       | 2.00                  | 0                                      | 0    | 1   | 0.000                        | 0.000        | 2.000       | 0.00                            | 0.00        | 8.76        | 0.0%                 | 0.000                          | 0.000        | 0.000                             | 0.000       |
| Extruder 3                 | -----       | 0.60                  | 0                                      | 0    | 1   | 0.000                        | 0.000        | 0.600       | 0.00                            | 0.00        | 2.63        | 0.0%                 | 0.000                          | 0.000        | 0.000                             | 0.000       |
| Extruder 4                 | -----       | 0.60                  | 0                                      | 0    | 1   | 0.000                        | 0.000        | 0.600       | 0.00                            | 0.00        | 2.63        | 0.0%                 | 0.000                          | 0.000        | 0.000                             | 0.000       |
| Extruder 5                 | -----       | 0.60                  | 0                                      | 0    | 1   | 0.000                        | 0.000        | 0.600       | 0.00                            | 0.00        | 2.63        | 0.0%                 | 0.000                          | 0.000        | 0.000                             | 0.000       |
| Extruder 6                 | -----       | 0.60                  | 0                                      | 0    | 1   | 0.000                        | 0.000        | 0.600       | 0.00                            | 0.00        | 2.63        | 0.0%                 | 0.000                          | 0.000        | 0.000                             | 0.000       |
| <b>Totals:</b>             |             |                       |                                        |      |     | <b>43.5</b>                  | <b>21.75</b> | <b>5.00</b> | <b>190.5</b>                    | <b>95.3</b> | <b>21.9</b> |                      | <b>1.50</b>                    | <b>0.750</b> | <b>6.57</b>                       | <b>3.29</b> |

Methodology

Potential Emissions = (E.F. in lb./ton)\* (throughput in ton/hour) \* 8760 hrs/yr / 2000 lbs/hr

Controlled Emissions = Potential Emissions \* (1-controlled efficiency)

Extruder VOC average E.F. from State of Wisconsin DNR Stack Test Results Summary sent to SPI, dated 12/5/1997 and approved for Significant Revision 053-10315

The receiving silos can receive resin at a maximum total rate of 14 tons per hour. Resin can also be moved from the silos at a rate of 14 tons per hour. However, since the same equipment is used to receive and move resin, the total throughput into or out of the silos cannot exceed 14 tons per hour. Therefore, the calculations for resin receiving are conservative for the total emissions from the receiving silos.

| Process           | Test Date | Maximum Throughput in tons/hr | Throughput During Test in tons/hr | Outlet Grain Loading during Test (gr/dscf) | Flow Rate During Test (dscfm) | Emission Rate During Test (lbs/hr) | Emission Factors in lbs/ton of Product |              | Potential emissions (lbs/hr) |              | Potential emissions (tons/year) |              |
|-------------------|-----------|-------------------------------|-----------------------------------|--------------------------------------------|-------------------------------|------------------------------------|----------------------------------------|--------------|------------------------------|--------------|---------------------------------|--------------|
|                   |           |                               |                                   |                                            |                               |                                    | PM                                     | PM10         | PM                           | PM10         | PM                              | PM10         |
| Resin Mixing (P1) | Dec-00    | 5.00                          | 4.10                              | 0.002291                                   | 2943                          | 0.058                              | 0.014                                  | 0.014        | 0.070                        | 0.070        | 0.309                           | 0.309        |
| Resin Mixing (P2) | --        | 2.50                          | --                                |                                            |                               |                                    | 0.014                                  | 0.014        | 0.035                        | 0.035        | 0.154                           | 0.154        |
| <b>Totals:</b>    |           |                               |                                   |                                            |                               |                                    | <b>0.028</b>                           | <b>0.028</b> | <b>0.106</b>                 | <b>0.106</b> | <b>0.463</b>                    | <b>0.463</b> |

Methodology

The resin mixing operations are controlled by baghouses which are used to collect powder sold as product. These are integral control devices.

Emission Rate during test (lbs/hr) = Outlet Grain Loading during Test (gr/dscf) x Flow Rated during Test (dscfm) x 60 min/hr x 1 lb/7,000 grains

Emission Factors in lbs/ton of Product = Emission Rate during test (lbs/hr) / Throughput during Test in tons per hour

Emission factors are the same for both mixing operations because they are similar processes and the emission factor developed by the stack test is more conservative than the emission factors generally used for this process (SCC 3-05-012-23)

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

**Company Name:** Prime PVC, Inc.  
**Address City IN Zip:** 1400 North Washington St., Marion, Indiana 46952  
**Permit Number:** 053-17312  
**Plant ID:** 053-00053  
**Reviewer:** CarrieAnn Paukowits  
**Date:** May 19, 2003

Heat Input Capacity  
 MMBtu/hr

Potential Throughput  
 MMCF/yr

1.70

14.9

| 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 | 0.014     | 0.057 | 0.004 | 0.745       | 0.041 | 0.625 |

\*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 3 for HAPs emissions calculations.

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

**Company Name:** Prime PVC, Inc.  
**Address City IN Zip:** 1400 North Washington St., Marion, Indiana 46952  
**Permit Number:** 053-17312  
**Plant ID:** 053-00053  
**Reviewer:** CarrieAnn Paukowits  
**Date:** May 19, 2003

| HAPs - Organics               |                    |                            |                         |                   |                    |
|-------------------------------|--------------------|----------------------------|-------------------------|-------------------|--------------------|
| Emission Factor in lb/MMcf    | Benzene<br>0.00210 | Dichlorobenzene<br>0.00120 | Formaldehyde<br>0.07500 | Hexane<br>1.80000 | Toluene<br>0.00340 |
| Potential Emission in tons/yr | 0.00002            | 0.00001                    | 0.00056                 | 0.01340           | 0.00003            |

| HAPs - Metals                 |                |                   |                    |                     |                  |              |
|-------------------------------|----------------|-------------------|--------------------|---------------------|------------------|--------------|
| Emission Factor in lb/MMcf    | Lead<br>0.0005 | Cadmium<br>0.0011 | Chromium<br>0.0014 | Manganese<br>0.0004 | Nickel<br>0.0021 | <b>Total</b> |
| Potential Emission in tons/yr | 0.000004       | 0.00001           | 0.00001            | 0.000003            | 0.00002          | <b>0.014</b> |

Methodology is the same as page 2.

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

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

**Company Name: Prime PVC, Inc.  
Address City IN Zip: 1400 North Washington St., Marion, Indiana 46952  
Permit Number: 053-17312  
Plant ID: 053-00053  
Reviewer: CarrieAnn Paukowits  
Date: May 19, 2003**

| PROCESS                                | Number of Stations | Max. electrode consumption per station (lbs/hr) |                                      | EMISSION FACTORS*<br>(lb pollutant/lb electrode)                |        |        |        | EMISSIONS<br>(lbs/hr) |       |       |       | HAPS<br>(lbs/hr) |
|----------------------------------------|--------------------|-------------------------------------------------|--------------------------------------|-----------------------------------------------------------------|--------|--------|--------|-----------------------|-------|-------|-------|------------------|
|                                        |                    |                                                 |                                      | PM = PM10                                                       | Mn     | Ni     | Cr     | PM = PM10             | Mn    | Ni    | Cr    |                  |
| <b>WELDING</b>                         |                    |                                                 |                                      |                                                                 |        |        |        |                       |       |       |       |                  |
| Submerged Arc                          | 1                  | 11.04166667                                     |                                      | 0.036                                                           | 0.011  |        |        | 0.398                 | 0.121 | 0.000 | 0.000 | 0.121            |
| Metal Inert Gas (MIG)(carbon steel)    | 1                  | 11.04166667                                     |                                      | 0.0055                                                          | 0.0005 |        |        | 0.061                 | 0.006 | 0.000 | 0.000 | 0.006            |
| Stick (E7018 electrode)                | 1                  | 11.04166667                                     |                                      | 0.0211                                                          | 0.0009 |        |        | 0.233                 | 0.010 | 0.000 | 0.000 | 0.010            |
| Tungsten Inert Gas (TIG)(carbon steel) | 1                  | 11.04166667                                     |                                      | 0.0055                                                          | 0.0005 |        |        | 0.061                 | 0.006 | 0.000 | 0.000 | 0.006            |
| Oxyacetylene(carbon steel)             | 1                  | 11.04166667                                     |                                      | 0.0055                                                          | 0.0005 |        |        | 0.061                 | 0.006 | 0.000 | 0.000 | 0.006            |
|                                        |                    |                                                 |                                      |                                                                 |        |        |        |                       |       |       |       |                  |
|                                        |                    |                                                 |                                      |                                                                 |        |        |        |                       |       |       |       |                  |
| FLAME CUTTING                          | Number of Stations | Max. Metal Thickness Cut (in.)                  | Max. Metal Cutting Rate (in./minute) | EMISSION FACTORS<br>(lb pollutant/1,000 inches cut, 1" thick)** |        |        |        | EMISSIONS<br>(lbs/hr) |       |       |       | HAPS<br>(lbs/hr) |
|                                        |                    |                                                 |                                      | PM = PM10                                                       | Mn     | Ni     | Cr     | PM = PM10             | Mn    | Ni    | Cr    |                  |
| Oxyacetylene                           | 1                  | 1                                               | 1.5                                  | 0.1622                                                          | 0.0005 | 0.0001 | 0.0003 | 0.015                 | 0.000 | 0.000 | 0.000 | 0.000            |
| Oxymethane                             | 1                  | 1                                               | 1.5                                  | 0.0815                                                          | 0.0002 |        | 0.0002 | 0.007                 | 0.000 | 0.000 | 0.000 | 0.000            |
| Plasma**                               | 1                  | 1                                               | 1.5                                  | 0.0039                                                          |        |        |        | 0.000                 | 0.000 | 0.000 | 0.000 | 0.000            |
|                                        |                    |                                                 |                                      |                                                                 |        |        |        |                       |       |       |       |                  |
| <b>EMISSION TOTALS</b>                 |                    |                                                 |                                      |                                                                 |        |        |        |                       |       |       |       |                  |
| Potential Emissions lbs/hr             |                    |                                                 |                                      |                                                                 |        |        |        | 0.412                 | 0.121 | 0.000 | 0.000 | 0.121            |
| Potential Emissions lbs/day            |                    |                                                 |                                      |                                                                 |        |        |        | 9.89                  | 2.92  | 0.000 | 0.000 | 2.92             |
| Potential Emissions tons/year          |                    |                                                 |                                      |                                                                 |        |        |        | 1.80                  | 0.532 | 0.000 | 0.000 | 0.532            |

**METHODOLOGY**

**Total is worst case welding and flame cutting for each pollutant.**

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

\*\*Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8 mm thick rather than 1 inch, and the maximum metal thickness is not used in calculating the emissions.

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

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

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

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