PART 70 OPERATING PERMIT
and ENHANCED NEW SOURCE REVIEW
OFFICE OF AIR MANAGEMENT

Patriot Homes, Inc.
57420 CR 3 S.
Elkhart, Indiana 46517

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T039-7535-00105	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary, manufactured housing manufacturing operation.

Responsible Official:	**Thomas Young, V.P. Finance/Treasurer**
Source Address:	**57420 CR 3 S., Elkhart, IN 46517**
Mailing Address:	**Two Key Square, 307 South Main Street, Elkhart, IN 46516**
SIC Code:	**2451, 3499**
County Location:	**Elkhart**
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

(a) One (1) manufactured housing production line, identified as PL1, located in Plant 1, producing single wide homes with a maximum capacity of 0.778 units per hour, exhausting through two (2) overhead doors on the east end of Plant 1, identified as PL1ED1 and PL1ED2.

(b) One (1) manufactured housing production line, identified as PL2, located in Plant 2, producing double wide homes with a maximum capacity of 0.400 units per hour, exhausting through four (4) wall vents identified as Stacks X9, X10, X11, and X12.

(c) Two (2) spray coating areas for painting interiors of double wide homes, identified as SG3 and SG4, located in Plant 7, with a maximum capacity of 0.400 units per hour. The areas exhaust through two (2) overhead doors on the east end of Plant 7, identified as PL7ED1 and PL7ED2.

(d) One (1) production line for the installation of floors and countertops in single wide homes, and floors, cabinets, and countertops in double wide homes, identified as PL7, located in Plant 7, with a maximum capacity of 1.222 units per hour, exhausting through two (2) overhead doors on the east end of Plant 7, identified as PL7ED1 and PL7ED2.

(e) Two (2) spray coating booths for painting metal frames for homes, identified as SG1 and SG2, located in Plant 6, with a maximum capacity of 1.375 units per hour. The booths use airless spray applicators with dry filters for overspray control, and exhaust through four (4) stacks, identified as X1, X2, X3, and X4.

(f) A woodworking shop in Plant 1, identified as the mill room / cabinet shop, equipped with one (1) baghouse dust collector identified as DC-1 for particulate control, exhausting through Stack DCX-1.

(g) A woodworking shop in Plant 2, identified as the mill shop, equipped with one (1) baghouse dust collector identified as DC-2 for particulate control, exhausting through Stack DCX-2 into the plant.

(h) A woodworking shop, identified as the Plant 6 Mill Shop, equipped with one (1) cyclone identified as C1 for particulate control, exhausting through Stack X5.

(i) A woodworking shop, identified as the Plant 7 Cabinet Shop, equipped with one (1) cyclone identified as C3 for particulate control, exhausting through Stack X6.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

(a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.

(b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled “Permit Shield.”

B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

(a) Unless otherwise stated, terms and conditions in this permit except for conditions A.1 through A.3, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.

(b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source’s potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

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

B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

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

(b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

(c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

(a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report 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, OAM, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was based on continuous or intermittent data;

(4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);

(5) Any insignificant activity that has been added without a permit revision; and

(6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [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 (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP 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 Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

B.13 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967.

(5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

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

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

(a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.

(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:

(1) The applicable requirements are included and specifically identified in this permit; or

(2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.

(c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.

(e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

within ten (10) calendar days from the date of the discovery of the deviation.

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) An emergency as defined in 326 IAC 2-7-1(12); or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

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

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) 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, OAM, on or before the date it is due. [326 IAC 2-5-3]

(2) If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAM, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAM, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

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

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

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

(a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

(b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]

(1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

(2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) IDEM, OAM, shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

B.27 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

(a) The total source potential to emit of PM and VOC are less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

(b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change.

C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

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

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6)-minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1)-minute non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

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

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

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Stack Height [326 IAC 1-7]

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

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(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 Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control

The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory 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) 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 that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

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 Management
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. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

(a) Has certified that all facilities at this source are in compliance with all applicable requirements; and

(b) Has submitted a statement that the Permittee will continue to comply with such requirements; and

(c) Will comply with such applicable requirements that become effective during the term of this permit.

C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.13 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.14 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

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

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

(a) Submit:

(1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or

(2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

(3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

(b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that 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 an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(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 corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(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, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) The annual emission statement 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, OAM, on or before the date it is due.

C.20 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information 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 kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.

(b) The report required in (a) of this condition and 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 Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) 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, OAM, on or before the date it is due.

(d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period.

(e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) 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.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) One (1) manufactured housing production line, identified as PL1, located in Plant 1, producing single wide homes with a maximum capacity of 0.778 units per hour, exhausting through two (2) overhead doors on the east end of Plant 1, identified as PL1ED1 and PL1ED2.

(b) One (1) manufactured housing production line, identified as PL2, located in Plant 2, producing double wide homes with a maximum capacity of 0.400 units per hour, exhausting through four (4) wall vents identified as Stacks X9, X10, X11, and X12.

(c) Two (2) spray coating areas for painting interiors of double wide homes, identified as SG3 and SG4, located in Plant 7, with a maximum capacity of 0.400 units per hour. The areas exhaust through two (2) overhead doors on the east end of Plant 7, identified as PL7ED1 and PL7ED2.

(d) One (1) production line for the installation of floors and countertops in single wide homes, and floors, cabinets, and countertops in double wide homes, identified as PL7, located in Plant 7, with a maximum capacity of 1.222 units per hour, exhausting through two (2) overhead doors on the east end of Plant 7, identified as PL7ED1 and PL7ED2.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

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

Any change or modification which may increase potential emissions from the surface coating operation, shall require prior approval from the OAM to determine applicability requirements of 326 IAC 8, before such change may occur.

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

The PM from each of the single wide and double wide manufactured housing production lines PL1 and PL2, from the spray coating areas SG3 and SG4, and from the installation line PL7 shall each not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation 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:

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

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if these facilities are in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]
(e) Two (2) spray coating booths for painting metal frames for homes, identified as SG1 and SG2, located in Plant 6, with a maximum capacity of 1.375 units per hour. The booths use airless spray applicators with dry filters for overspray control, and exhaust through four (4) stacks, identified as X1, X2, X3, and X4.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

The volatile organic compound (VOC) content of air dried coatings applied to metal frames shall be limited to 3.5 pounds of VOC per gallon of coating less water as delivered to the applicator.

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

D.2.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the spray coating booths, SG1 and SG2, shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation 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:

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

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.2.4 Volatile Organic Compounds

Compliance with the VOC content and usage limitations contained in Condition D.2.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) using formulation data supplied by the coating manufacturer. However, IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when paint booth SG1 or paint booth SG2 is in operation.

D.2.7 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (X1, X2, X3, and X4) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.8 Record Keeping Requirements

(a) To document compliance with Condition D.2.1, the Permittee shall maintain data sheets confirming that the VOC content of each coating used is less than 3.5 pounds per gallon.

(b) To document compliance with Condition D.2.6 and D.2.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(f) A woodworking shop in Plant 1, identified as the mill room / cabinet shop, equipped with one (1) baghouse dust collector identified as DC-1 for particulate control, exhausting through Stack DCX-1.

(g) A woodworking shop in Plant 2, identified as the mill shop, equipped with one (1) baghouse dust collector identified as DC-2 for particulate control, exhausting through Stack DCX-2 into the plant.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the woodworking facilities shall be calculated with the following equation:

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

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

At process weight rates of 5374 pounds per hour for the Plant 1 shop and 4937 pounds per hour for the Plant 2 shop, the allowable PM emission rate shall not exceed 7.51 pounds per hour and 7.95 pounds per hour, respectively.

D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.3.3 Testing Requirements [326 IAC 2-7-6(1)(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.3.4 Particulate Matter (PM)

The dust collector for PM control shall be in operation at all times when the woodworking shop is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.5 Visible Emissions Notations

(a) Daily visible emission notations of the dust collector stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.3.6 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the woodworking operation 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.3.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) 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) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.8 Record Keeping Requirements

(a) To document compliance with Condition D.3.5, the Permittee shall maintain records of daily visible emission notations of the dust collector stack exhaust.

(b) To document compliance with Condition D.3.6, the Permittee shall maintain records of the results of the inspections required under Condition and the dates the vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(h) A woodworking shop, identified as the Plant 6 Mill Shop, equipped with one (1) cyclone identified as C1 for particulate control, exhausting through Stack X5.

(i) A woodworking shop, identified as the Plant 7 Cabinet Shop, equipped with one (1) cyclone identified as C3 for particulate control, exhausting through Stack X6.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the woodworking facilities shall be calculated with the following equation:

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

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

At process weight rates of 3163 pounds per hour for the Plant 6 shop and 866 pounds per hour for the Plant 7 shop, the allowable PM emission rate shall not exceed 5.57 pounds per hour and 2.34 pounds per hour, respectively.

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.4.3 Testing Requirements [326 IAC 2-7-6(1)(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.4.4 Particulate Matter (PM)

The cyclone for PM control shall be in operation at all times when the woodworking shop is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.5 Visible Emissions Notations

(a) Daily visible emission notations of the cyclone stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.4.6 Cyclone Inspections

An inspection shall be performed each calender quarter of all cyclones controlling the woodworking operation when venting to the atmosphere. A cyclone 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.

D.4.7 Cyclone Failure Detection

In the event that cyclone failure has been observed:

The affected cyclone will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) 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) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.8 Record Keeping Requirements

(a) To document compliance with Condition D.4.5, the Permittee shall maintain records of daily visible emission notations of the cyclone stack exhaust.

(b) To document compliance with Condition D.4.6, the Permittee shall maintain records of the results of the inspections required under Condition D.4.6 and the dates the vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]; Insignificant Activity [326 IAC 2-7-1(21)]
Welding operations, including Plant 6 Frame Shop welding, exhausting through stack WX.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Particulate Matter (PM) [326 IAC 6-3]

(a) Pursuant to 326 IAC 6-3-2(c) (Process Operations), the allowable PM emission rate from the welding operations shall not exceed 0.551 pounds per hour for a maximum process weight rate less than 100 pounds per hour.

(b) The PM from the welding operations shall not exceed the pound per hour emission rate established as E in the following formula, for a process weight rate equal to or greater than 100 pounds per hour:

Interpolation and extrapolation 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:

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

Compliance Determination Requirement

D.5.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.5.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Patriot Homes, Inc.
Source Address: 57420 CR 3 S., Elkhart, IN 46517
Mailing Address: Two Key Square, 307 South Main Street, Elkhart, IN 46516
Part 70 Permit No.: T039-7535-00105

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

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

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

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT

COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: Patriot Homes, Inc.
Source Address: 57420 CR 3 S., Elkhart, IN 46517
Mailing Address: Two Key Square, 307 South Main Street, Elkhart, IN 46516
Part 70 Permit No.: T039-7535-00105

This form consists of 2 pages **Page 1 of 2**

Check either No. 1 or No.2

9 1. This is an emergency as defined in 326 IAC 2-7-1(12)
- C The Permittee must notify the Office of Air Management (OAM), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- C The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

9 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)
- C The Permittee must submit notice in writing within ten (**10**) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
SEMI-ANNUAL COMPLIANCE MONITORING REPORT

Source Name: Patriot Homes, Inc.
Source Address: 57420 CR 3 S., Elkhart, IN 46517
Mailing Address: Two Key Square, 307 South Main Street, Elkhart, IN 46516
Part 70 Permit No.: T039-7535-00105

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	**Number of Deviations**	**Date of each Deviation**

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Part 70 Operating Permit and Enhanced New Source Review (ENSR)

Source Background and Description

Source Name:	**Patriot Homes, Inc.**
Source Location:	**57420 CR 3 S., Elkhart, IN 46517**
County:	**Elkhart**
SIC Code:	**2451, 3499**
Operation Permit No.:	**T039-7535-00105**
Permit Reviewer:	**Vickie Cordell**

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Patriot Homes, Inc. relating to a manufactured housing operation.

Permitted Emission Units and Pollution Control Equipment

There are no previously permitted facilities operating at this source during this review process.

Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR

The source consists of the following unpermitted facilities/units:

(a) One (1) manufactured housing production line, identified as PL1, located in Plant 1, producing single wide homes with a maximum capacity of 0.778 units per hour, exhausting through two (2) overhead doors on the east end of Plant 1, identified as PL1ED1 and PL1ED2.

(b) One (1) manufactured housing production line, identified as PL2, located in Plant 2, producing double wide homes with a maximum capacity of 0.400 units per hour, exhausting through four (4) wall vents identified as Stacks X9, X10, X11, and X12.

(c) Two (2) spray coating areas for painting interiors of double wide homes, identified as SG3 and SG4, located in Plant 7, with a maximum capacity of 0.400 units per hour. The areas exhaust through two (2) overhead doors on the east end of Plant 7, identified as PL7ED1 and PL7ED2.

(d) One (1) production line for the installation of floors and countertops in single wide homes, and floors, cabinets, and countertops in double wide homes, identified as PL7, located in Plant 7, with a maximum capacity of 1.222 units per hour, exhausting through two (2) overhead doors on the east end of Plant 7, identified as PL7ED1 and PL7ED2.

(e) Two (2) spray coating booths for painting metal frames for homes, identified as SG1 and SG2, located in Plant 6, with a maximum capacity of 1.375 units per hour. The booths use airless spray applicators with dry filters for overspray control, and exhaust through four (4) stacks, identified as X1, X2, X3, and X4.

(f) A woodworking shop in Plant 1, identified as the mill room / cabinet shop, equipped with one (1) baghouse dust collector identified as DC-1 for particulate control, exhausting through Stack DCX-1.

(g) A woodworking shop in Plant 2, identified as the mill shop, equipped with one (1) baghouse dust collector identified as DC-2 for particulate control, exhausting through Stack DCX-2 into the plant.

(h) A woodworking shop, identified as the Plant 6 Mill Shop, equipped with one (1) cyclone identified as C1 for particulate control, exhausting through Stack X5.

(i) A woodworking shop, identified as the Plant 7 Cabinet Shop, equipped with one (1) cyclone identified as C3 for particulate control, exhausting through Stack X6.

New Emission Units and Pollution Control Equipment Requiring ENSR

There are no new facilities to be reviewed under the ENSR process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.

(b) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, have a storage capacity less than or equal to 10,500 gallons.

(c) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(d) VOC and HAP storage containers: storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

(e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(f) Paved and unpaved roads and parking lots with public access.

(g) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only. Pb 0.6 ton per year or 3.29 pounds per day, SO_2 5 pounds per hour or 25 pounds per day. NO_x 5 pounds per hour or 25 pounds per day, CO 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, VOC 3 pounds per hour or 15 pounds per day:

Welding operations with PM-10 emission less than five (5) pounds per hour or twenty-five (25) pounds per day.

Existing Approvals

The source was issued a registration for a wood fired burn cell, Registration 039-00105, on February 25, 1991. However, no conditions from this Registration were incorporated into this Part 70 permit because the burn cell is no longer in use.

No other previous approvals have been issued to this source.

Enforcement Issue

(a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR.*

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

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

An administratively complete Part 70 permit application for the purposes of this review was received on December 12, 1996. Additional information was received on October 23, 1997, February 10, 1998, and March 13, 1998.

A notice of completeness letter was mailed to the source on January 10, 1997.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 8.)

Potential Emissions

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as "emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility."

Pollutant	Potential Emissions (tons/year)
PM	greater than 250
PM-10	greater than 100, less than 250
SO_2	less than 100
VOC	less than 100
CO	less than 100
NO_x	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Cyanide Compounds	less than 10
4-4'-Diphenyl-methane-Diisocyanate	less than 10
Ethylene Glycol	less than 10
Glycol Ethers	less than 10
Hexane	less than 10
Methyl Ethyl Ketone	less than 10
Methylene Chloride	less than 10
Toluene	less than 10
Vinyl Acetate	less than 10
Xylene	less than 10
Xylene Glycol	less than 10
TOTAL	greater than 25

(a) The potential emissions (as defined in 326 IAC 1-2-55) of PM-10 are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The potential emissions (as defined in 326 IAC 1-2-55) of a combination of HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information was provided in the sources' permit application.

Pollutant	Actual Emissions (tons/year)
PM	not available
PM-10	2.17
SO_2	not available
VOC	23.32
CO	not available
NO_x	not available
HAP (specify)	4.57

No previous emission statement has been received from the source.

Limited Potential to Emit / Source Status

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

	Limited Potential to Emit (tons/year)			
Process/facility	PM	PM-10	VOC	HAPs
PL1	.03	.03	62.50	20.85
PL2	.01	.01	20.00	10.16
SG1/SG2	22.53	22.53	3.19	0
SG3	60.18	60.18	3.27	0
SG4	60.18	60.18	3.27	0
Plant 1	34.82	34.82	0	0
Plant 2	32.89	32.89	0	0
Plant 6	24.41	24.41	0	0
Plant 7	10.24	10.24	0	0
Welding*	2.41	2.41	0	0
Total Emissions	247.7	247.7	92.23	31.01

* PM from this process is limited by 326 IAC 6-3 (Process Operations). PM-10 is not directly limited by any rule. However, there is no condensible PM-10 from the woodworking operations and no or minimal condensible PM-10 from the welding operations; all the PM-10 is filterable and therefore would be considered PM pursuant to 326 IAC 6-3.

(a) This new source is **not** a major stationary source because no attainment 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. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

(b) The woodworking PM is limited to a total of 102.36 tons/yr, therefore, the 326 IAC 2-2, PSD requirements do not apply. The individual process limits are equivalent to the wood throughputs shown on Appendix A pages 6 and 7.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment (maintenance) or unclassifiable for ozone.

Federal Rule Applicability

(a) There are no New Source Performance Standards (326 IAC 12, 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(40 CFR Part 63) applicable to this source. The cabinet shop woodworking operation is not covered by 40 CFR Part 63, Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations), because the cabinets are pre-finished and are only cut to fit and installed.

State Rule Applicability - Entire Source

326 IAC 2-2, 40 CFR 52.21 (PSD Minor Source Status)

The total source potential to emit of PM and VOC are less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

326 IAC 1-7 (Stack Height Provisions)

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.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in Elkhart county and has the potential to emit more than ten (10) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

(a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,

(b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This rule is not applicable because the source did not begin operation between October 7, 1974, and January 1, 1980. In addition, the potential VOC emissions from the source were, and continue to be, less than 100 tons per year.

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

This rule is not applicable to the frame paint booths (SG1 and SG2) because the actual VOC emissions from each booth are less than 15 pounds per day. The potential VOC emissions from each booth are also less than 15 pounds per day.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

This rule is not applicable to the any of the operations at this source. The cabinets are pre-finished and are only trimmed to fit and installed.

326 IAC 8-1-6 (General Provisions Relating to VOC Rules)

The operations in the double-wide home plant (PL2), the floor and countertop plant (P7), and the two frame paint booths (SG1 and SG2) are not subject to 326 IAC 8-1-6 (General Provisions Relating to VOC Rules) because the potential VOC emissions from each facility are less than 25 tons per year.

The operations in the single-wide home plant (PL1), and the double-wide interior coating areas (SG3 and SG4), are not subject to 326 IAC 8-1-6 (General Provisions Relating to VOC Rules) because they have been in operation since the 1950's and no modifications have been made to these facilities on or after January 1, 1980. The potential VOC emissions from SG3 and SG4 are also less than 25 tons per year.

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2(c)(Process Operation), the allowable PM emission rate from each of the paint areas and booths, and from each of the woodworking operations, shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation 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:

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

Individual compliance calculations for the woodworking operations are shown on Appendix A pages 6 and 7.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

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

1. The spray coating booths SG1 and SG2 have applicable compliance monitoring conditions as specified below:

   (a) The dry filters for PM control shall be in operation at all times when paint booth SG1 or paint booth SG2 is in operation.

   (b) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, daily observations shall be made of the overspray from the surface coating booth stacks (X1, X2, X3, and X4) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

   (c) Weekly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

   (d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

2. The woodworking shops in Plant 1 and Plant 2, identified as the mill room / cabinet shop and the mill shop, have applicable compliance monitoring conditions as specified below:

   (a) Daily visible emission notations of the dust collector stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

   (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

   (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

   (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

   (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

   (f) An inspection shall be performed each calender quarter of all bags controlling the woodworking operation 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.

   (g) In the event that bag failure has been observed:

      (1) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

      (2) Within eight (8) 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) hours of discovery of the failure and shall include a timetable for completion.

3. The woodworking shops in Plant 6 and Plant 7, identified as the mill shop and the cabinet shop, have applicable compliance monitoring conditions as specified below:

   (a) Daily visible emission notations of the cyclone stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

   (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

   (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

(f) An inspection shall be performed each calender quarter of all cyclones controlling the woodworking operation when venting to the atmosphere. A cyclone 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.

(g) In the event that cyclone failure has been observed:

(1) The affected cyclone will be shut down immediately until the failed unit has been repaired or replaced.

(2) Within eight (8) 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) hours of discovery of the failure and shall include a timetable for completion.

These monitoring conditions are necessary because the dry filter, dust collectors, and cyclones must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

(a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the Clean Air Act. The concentrations of these air toxics were modeled and found to be (in worst case possible) as follows: methyl ethyl ketone, 590000 $\mu g/m^3$; toluene, 752000 $\mu g/m^3$; xylene, 435000 $\mu g/m^3$; cyanide compounds 5000 $\mu g/m^3$; 4-4' methylene diphenyl diisocyanate, 200 $\mu g/m^3$; ethylene glycol, 125000 $\mu g/m^3$; and methylene chloride, 1740000 $\mu g/m^3$. The concentrations of these air toxics were compared to the Permissible Exposure Limits (PEL) developed by the Occupational Safety and Health Administration (OSHA). The maximum concentrations of cyanide compounds and 4-4' methylene diphenyl diisocyanate calculated for an eight (8) hour period were found to exceed 0.5% of the PEL for that compound. Therefore, additional emission control may be required in the future. The Office of Air Management (OAM) does not have at this time any specific statutory or regulatory authority over these substances.

(b) See attached calculations for detailed air toxic calculations, Appendix A pages 4, 5, and 8.

Conclusion

The operation of this manufactured housing operation shall be subject to the conditions of the attached proposed **Part 70 Permit No. T039-7535-00105.**

Indiana Department of Environmental Management
Office of Air Management

Addendum to the
Technical Support Document for a Part 70 Operating Permit
and Enhanced New Source Review (ENSR)

Source Name:	**Patriot Homes, Inc.**
Source Location:	**57420 CR 3 S., Elkhart, IN 46517**
County:	**Elkhart**
SIC Code:	**2451, 3499**
Operation Permit No.:	**T039-7535-00105**
Permit Reviewer:	**Vickie Cordell**

On October 7, 1998, the Office of Air Management (OAM) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that Patriot Homes, Inc. had applied for a Part 70 Operating Permit to operate a manufactured housing operation. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On October 27, 1998, and November 10, 1998, Patriot Homes, Inc. submitted comments on the proposed Part 70 permit. The summary of the comments is as follows (additions to the permit and TSD are bolded for emphasis):

Comment 1:

Please correct the potential HAP emissions listed in the Technical Support Document (TSD. Carlon PVC Cement contains no toluene and Sta'Put IV Adhesive no longer has methylene chloride in it. Region V EPA has confirmed that the isocyanate (CAS 9016-87-9) in Pemco 5100 is not a cyanide compound. Backup documentation is included showing that only a very small amount of the MDI and PMDI is emitted from F2100A, Pemco 5100, and Panel Hold Adhesives. This corrections would reduce the potential HAPs to less than 25 tons per year (making the source minor for HAPs).

Response 1:

Updated material safety data sheets (MSDS) were used to revise the potential HAPs emissions from Carlon PVC Cement, Sta'Put Adhesive, Kwik Seal Tub & Tile Sealer, and Weld-On 771 and 773 Cements. Potential combined HAP emissions for the source are now calculated at 17 tons per year, and the source is currently considered a minor source pursuant to HAPs emissions.

Region V EPA reviewed the MDI (Diphenylmethane Diisocyanate) emission calculations provided by Patriot Homes. EPA concluded that one or more of the estimation methods appeared to be sound, but noted that monitoring is probably the best way to get accurate waste release information. IDEM would accept reduced emissions estimates for MDI but confirmatory testing would be required. This is not practical for this particular permit because the maximum potential MDI emissions are less than 3 tons per year, there would be no resulting change in the source status, and capturing emissions from Plant 1 and Plant 2 for testing would be extremely difficult. Therefore, there has been no change in the MDI emission calculations.

No change will be made to the TSD. The OAM prefers that the TSD reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Revised spreadsheets are included as TSD Addendum Appendix A, Page 1 and 2. The potential HAPs emissions from the source are now as follows:

HAP's	Potential Emissions (tons/year)
4-4'-Diphenylmethane-Diisocyanate	less than 10
Ethylene Glycol	less than 10
Glycol Ethers	less than 10
Hexane	less than 10
Manganese Compounds	less than 10
Methylene Chloride	less than 10
Toluene	less than 10
Vinyl Acetate	less than 10
Xylene	less than 10
TOTAL	less than 25

Comment 2:

Condition B.1 (Permit No Defense) should be deleted. Because Condition B.14 provides for a permit shield, 326 IAC 2-1-10 is not applicable to this source.

Response 2:

The "permit no defense" provisions are applicable and do not conflict with the "permit shield" provisions. The first provision states the mere holding of a permit is not a defense of any violation, except of course for the requirement to hold such a permit. The second provision provides a defense, but only if the permittee is in compliance with the relevant condition of the permit. Condition B.1 cites both concepts and Condition B.14 elaborates on the Permit Shield provisions of 326 IAC 2-7-15. There has been no change to this condition.

Comment 3:

Because of the explicit language of Section A, Condition B.4 (Enforceability) should contain the phrase, "except for conditions A.1 through A.3".

Response to 3:

As stated in the beginning paragraph of Section A, the facility descriptions in conditions A.1, A.2, and A.3 are not enforceable conditions. Therefore, Condition B.4(a) has been changed as follows:

B.4 Enforceability [326 IAC 2-7-7(a)]

(a) **Unless otherwise stated,** ~~All~~ terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.

However, the source should be aware that any addition or change to these facilities which could significantly increase potential emissions would require additional permit review under state New Source Review rules. In addition, the corresponding D section conditions are specific to the listed facilities and the requirements which are applicable to those facilities. Addition or modification to these facilities could trigger a change in applicable requirements.

Comment 4:

Re: Condition B.14(c) (Permit Shield): Throughout the Title V process, IDEM has been encouraging "permit cleansing" to grant relief from outdated conditions in old permits and registrations. If IDEM wants to continue such conditions, they must be specifically listed as applicable requirements. The phrase "including any term or condition from a previously issued construction or operation permit" is counter to this policy, unauthorized by 326 IAC 2-7-15 and must be deleted.

Response 4:

It is noted that Patriot Homes, Inc. has no previous construction or operation permits for any of the equipment which is currently in use. On July 28, 1998, the OAM was notified that the U.S. EPA would object to any Title V Operating Permit that superceded all previous construction permits. The U.S. EPA indicated that they believed that the authority for certain applicable requirements might expire if the construction permits that established them expired. The OAM believes that the regulatory process is best served if all affected parties are able to rely on the Title V Operating Permit to identify all applicable requirements and the means for demonstrating compliance with each requirement.

The OAM intends to continue discussions with the U.S. EPA regarding the issues related to past construction permits. However the OAM also believes that the Permit Shield condition B.14 (a) (1) & (2) establishes that the Title V permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of the permit shall be deemed in compliance with any applicable requirements as of the date of the permit issuance for all the previous permits identified by the source and the OAM during the course of this review. There has been no change to this condition.

Comment 5:

Condition B.16(a) (Deviations from Permit Conditions) requires reporting of any deviation from any permit requirement within ten days from the date of discovery. 326 IAC 2-7-5(3)(c) requires this reporting only every six months. The ten day requirement is unauthorized and must be deleted.

Response 5:

326 IAC 2-7-5(3)(c)(i) sets out the requirement of reporting required monitoring at least every six months. This report must include an identification of all permit deviations. 326 IAC 2-7-5(3)(c)(ii) sets out a separate requirement for reporting those deviations, including all the information required in each deviation report. OAM maintains that reporting deviations every six months is not adequate to ensure that the cause of any reoccurring deviation is corrected in a timely fashion. Ten days has been determined to be a reasonable amount of time to report non-emergency deviations, rather than the shorter reporting times required by the Emergency Provisions. The use of alternate reporting periods is authorized pursuant to 326 IAC 2-7-6(6) (Compliance Requirements) which states "Such other provisions as the commissioner may require", and pursuant to IC 13-14-1-13 which gives the Commissioner authority to establish monitoring and reporting requirements.

In addition, the source should be aware that six months is not the only deviation reporting time period required by 326 IAC 2-7-5(3)(C) (Permit Content). 326 IAC 2-7-5(3)(C)(ii)states "Notwithstanding requirements in this section, the reporting of deviations required by an applicable requirement shall follow the schedule stated in that applicable requirement." 326 IAC 2-7-16(b)(4) (Emergency Provision) requires notification within four (4) daytime business hours after the beginning or discovery of an emergency, and 326 IAC 2-7-16(b)(5) requires the submittal of a faxed or written notice within 2 working days of the time when emission limitations were exceeded due to the emergency.

There has been no change to this condition as a result of this comment.

Comment 6:

Condition B.24 (Inspection and Entry), subsection (e) is not authorized under 326 IAC 2-7-6(2). Because 2-7-6(2) is specific as to the scope of access, IDEM cannot use the catchall provision of 2-7-6(6) to add provisions excluded from the rule. IDEM is not granted authorization to use photographic or recording devices without the permission of the permittee, and Condition B.24(e) must be deleted.

Response 6:

Photographs are routinely taken to document conditions during an inspection, and are therefore included in 326 IAC 2-7-6(2)(C). The use of cameras or other recording, testing, or monitoring equipment for the purpose of assuring compliance with this permit, if necessary, is a reasonable extension of this documentation. This subsection acknowledges the right of the source to claim such information is confidential. There has been no change to this condition.

Comment 7:

Re: Condition B.28 (Credible Evidence): IDEM has never been authorized to adopt the EPA's credible evidence rule, nor has it been authorized to use methods other than reference test methods to determine compliance status. This condition is clearly beyond IDEM's scope of authority and must be deleted.

Response 7:

The IDEM now believes that this condition is not necessary and has removed it from the permit. The issues regarding credible evidence can be adequately addressed during a showing of compliance or noncompliance. Indiana's statutes, and the rules adopted under their authority, govern the admissibility of evidence in any proceeding. Indiana law contains no provisions that limit the use of any credible evidence and an explicit statement is not required in the permit.

~~B.28 Credible Evidence [326 IAC 2-7-5(3)][62 Federal Register 8313][326 IAC 2-7-6]~~

~~Not withstanding the conditions of this permit that state specific methods that may be used to assess compliance or noncompliance with applicable requirements, other credible evidence may be used to demonstrate compliance or non-compliance.~~

Comment 8:

Condition C.2 (Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds Per Hour) must be deleted. 326 IAC 6-3-2 does not apply to sources with a process weight rate less than 100 pounds per hour.

Response 8:

326 IAC 6-3-2 is applicable to operations at any process weight rate, unless a process is otherwise regulated by 326 IAC 6-1. There is nothing in this rule which states otherwise. There has been no change to this condition.

Comment 9:

Condition C.16 (Risk Management Plan) is applicable only for sources at which IDEM finds that there is a regulated substance subject to 40 CFR 68 present in more than a threshold quantity. This is not such a source. Therefore, this condition should be deleted.

Response 9:

The Risk Management Plan provision does not state that the Permittee has more that the threshold quantity of a regulated substance. The provision may be applicable if the Permittee does meet the threshold at some time in the future. The condition remains in the permit.

Comment 10:

Condition C.17 (Compliance Monitoring Plan - Failure to Take Response Steps) is not authorized under either 326 IAC 2-7-5 or 2-7-6. In addition, 326 IAC 1-6 is no longer applicable to Permittee pursuant to 326 IAC 2-7-16(d). This Condition serves no beneficial purpose at the facility and is unduly burdensome and oppressive. As such, it is arbitrary, capricious and beyond the authority of 326 IAC 2-7 and must be deleted.

Response 10:

326 IAC 2-7-16 is applicable during emergencies, and supersedes 326 IAC 1-6 in times of emergency. Other portions of 326 IAC 1-6 are still relevant to Title V sources, including 326 IAC 1-6-3 (Preventive Maintenance Plans), and 326 IAC 1-6-5 (Excessive Malfunctions). There has been no change to permit conditions as a result of this comment.

IDEM has worked with members of the Clean Air Act Advisory Council's Permit Committee, Indiana Manufacturing Association, Indiana Chamber of Commerce and individual applicants regarding the Preventive Maintenance Plan, the Compliance Monitoring Plan and the Compliance Response Plan. The plans are fully supported by rules promulgated by the Air Pollution Control Board. The plans are the mechanism each permittee will use to verify continuous compliance with its permit and the applicable rules and will form the basis for each permittee's Annual Compliance Certification. Each permittee’s ability to verify continuous compliance with its air pollution control requirements is a central goal of the Title V and FESOP permit programs.

The regulatory authority for and the essential elements of a compliance monitoring plan were clarified in IDEM's Compliance Monitoring Guidance, in May 1996. IDEM originally placed all the preventive maintenance requirements in the permit section titled “Preventive Maintenance Plan.” Under that section the permittee’s Preventive Maintenance Plan (PMP) had to set out requirements for the inspection and maintenance of equipment both on a routine basis and in response to monitoring. Routine maintenance was a set schedule of inspections and maintenance of the equipment. The second was inspection and maintenance in response to monitoring that showed that the equipment was not operating in its normal range. This monitoring would indicate that maintenance was required to prevent the exceedance of an emission limit or other permit requirement.

The maintenance plan was to set out the "corrective actions" that the permittee would take in the event an inspection indicated an “out of specification situation”, and also set out the time frame for taking the corrective action. In addition, the PMP had to include a schedule for devising additional corrective actions for out of compliance situations that the source had not predicted in the PMP. All these plans, actions and schedules were part of the Preventive Maintenance Plan, with the purpose of maintaining the permittee’s equipment so that an exceedance of an emission limit or violation of other permit requirements could be prevented.

After issuing the first draft Title V permits on public notice in July of 1997, IDEM received comments from members of the regulated community regarding many of the draft permit terms, including the PMP requirements. One suggestion was that the corrective action and related schedule requirements be removed from the PMP requirement and placed into some other requirement in the permit. This suggestion was based, in some part, on the desire that a permittee's maintenance staff handle the routine maintenance of the equipment, and a permittee's environmental compliance and engineering staff handle the compliance monitoring and steps taken in reaction to an indication that the facility required maintenance to prevent an environmental problem.

IDEM carefully considered this suggestion and agreed to separate the "corrective actions" and related schedule requirements from the PMP. These requirements were placed into a separate requirement, which IDEM named the Compliance Response Plan (CRP). In response to another comment, IDEM changed the name of the "corrective actions" to "response steps." That is how the present CRP requirements became separated from the PMP requirement, and acquired their distinctive nomenclature.

The Compliance Monitoring Plan is made up of the PMP, the CRP, the compliance monitoring and compliance determination requirements in section D of the permit, and the record keeping and reporting requirements in sections C and D. IDEM decided to list all these requirements under this new name, the Compliance Monitoring Plan (CMP), to distinguish them from the PMP requirements. The section D provisions set out which facilities must comply with the CMP requirement. The authority for the CMP provisions is found at 326 IAC 2-7-5(1), 2-7-5(3), 2-7-5(13). 2-7-6(1), 1-6-3 and 1-6-5.

Comment 11:

Re: Condition C.19 (Emission Statement): The Department has been considering revising 326 IAC 2-6 for some time. This Condition should be amended to delete everything following 326 IAC 2-6 in the second line.

Response 11:

No change to 326 IAC 2-6 was included in the December 1998 rule revision. The condition reflects current rule language; therefore, there has been no change to this condition.

Comment 12:

Requirements of Conditions D.2.6 (Monitoring) and D.2.7 (Record Keeping Requirements) are burdensome, excessive and completely out of proportion to those needed to assure compliance with 326 IAC 6-3. “Particulate Matter” under Indiana law is that fraction of total suspended particulate matter “with an aerodynamic diameter smaller than one hundred (100) micrometers”. The amount of “particulate matter” generated by Permittee’s spray booths is well below the allowable under 6-3. First, only a small fraction of the solids in overspray is PM-100. In addition, potential to emit can only be based upon the potential emissions to the ambient air. Because most overspray never exits the coating booth, potential “emissions” from this process are well below allowable under 6-3 even if the filters were not used. Because the process can meet 6-3 without controls, the monitoring and record keeping requirements of Conditions 2.6 and 2.7 are arbitrary, capricious and an abuse of discretion. 326 IAC 2-7-6(1) authorizes only those monitoring, reporting and record keeping requirements “sufficient to assure compliance with” applicable requirements.

Response 12:

These conditions have been renumbered due to the addition of a new condition (Condition D.2.4, see additional changes after comment/response section of this Addendum); they are now numbered D.2.7 (Monitoring) and D.2.8 (Record Keeping Requirements).

While there are definitions of particulate matter that include diameter, the reference method for determining compliance with the limitations that apply to particulate matter emissions from these facilities is a "method 5 stack test". This method does not exclude any normal sized particle in the measurement of emission rate. The OAM does not believe that such a test is necessary to demonstrate compliance at this time, but discussions of particulate matter emission rates should be made in terms of these methods.

Complying with the requirements of 326 IAC 6-3-2 can be especially variable for paint booths. The actual substrate being painted and the solids content of the paint being used can affect the process weight rate, the gallons or pounds of solids used, transfer efficiency, or other factors that directly affect actual, allowable, or potential emissions. While permit applications contain representative information regarding these factors, relying on this information as an ongoing demonstration of compliance is difficult if the factors are not themselves enforceable. The OAM does not believe that it would be generally advisable to include these factors as permit conditions, to make them enforceable or to presume that they are so fixed they define a source's potential emissions because either could severely limit a source's operational flexibility.

Properly operating the air pollution controls that are already in place is generally adequate to demonstrate compliance with 326 IAC 6-3 in lieu of a stack test and also assures compliance with applicable rules limiting fugitive dust, opacity, and (when necessary) Potential to Emit. The OAM believes that checking the placement and integrity of the filters once a day is a very effective means of ensuring proper operation and ongoing compliance. In addition, evidence of deposition on the rooftops or the ground strongly implies increased particulate matter emissions into the air.

The OAM has re-evaluated the other compliance monitoring provisions related to evidence of actual emissions from the paint booths and believes that less resource intensive provisions are appropriate. The frequency of visible emissions evaluations has been changed from daily to weekly. The frequency of inspections of rooftops or other surfaces for a noticeable change in solids deposition has been changed from weekly to monthly.

Conditions have been changed as follows:

D.2.~~6~~**7** Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, ~~daily~~ **weekly** observations shall be made of the overspray from the surface coating booth stacks (X1, X2, X3, and X4) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) ~~Weekly~~ **Monthly** inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.2.~~7~~**8** Record Keeping Requirements

(a) To document compliance with Condition D.2.5 and D.2.6, the Permittee shall maintain a log of ~~daily~~ **weekly** overspray observations, daily and ~~weekly~~ **monthly** inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Comments 13 and 14:

Condition(s in Section) D.3 (facility operation conditions for the woodworking operations controlled by baghouse dust collectors) purport to regulate the Plant 1 and 2 woodworking shops and associated baghouses. Please be advised that these baghouses do not exhaust to the ambient air, and therefore IDEM has no jurisdiction over these. Section D.3 must be deleted. Even were these legitimately covered, we would have the following objections:

A. Condition D.3.1 (Particulate Matter (PM)) by limiting PM emissions to 7.95 lbs/hour for plant 1 (at a process rate of 5374 lbs/hour) and 7.51 lbs/hour (at a process rate of 4937 lbs/hour), could be deemed to be a limitation on process throughput. Rule 6-3 can control emissions per unit of process throughput per hour, but cannot be used to limit the process throughput. This Condition should state simply that the allowable PM emission rate will be calculated under 326 IAC 6-3.

B. Conditions D.3.2, 3.4, 3.5, 3.6, and 3.8 (Preventive Maintenance Plan, Particulate Matter (PM), Visible Emissions Notations, Baghouse Inspections, and Record Keeping Requirements) should all be deleted. None of these conditions constitutes a legitimate requirement under 326 IAC 2-7-5 or 2-7-6. Rule 6-3 governs emissions of PM-100. The woodworking operations at this source tend to produce sawdust that is predominantly larger than 150 um. That portion of the exhaust stream above 1um in diameter is not particulate matter and cannot be counted in calculating potential or actual PM emissions. Attached is a description and the results of a particle size analysis performed on a representative sample of Permittee's sawdust stream. Only 12.68% of the stream would pass through the 125-micron screen. Revised emission calculations show that uncontrolled emissions of PM from Plant 1 are 1.775 lbs/hr and from Plant 2, 1.630 lbs/hr. These emission rates are approximately 22% of allowable, demonstrating that these facilities meet 6-3 without controls. Therefore, no monitoring, record keeping or reporting is required or justified.

The Permittee has the same objections to D.4.1, 4.2, 4.4, 4.5, 4.6, 4.7, and 4.8 (facility operation conditions for the woodworking operations controlled by cyclone) as it has set forth above for Section D.3.

Response 13/14:

Exhausting into the building does not assure that no PM will be emitted to the atmosphere. If noticeable particulate matter were to be emitted from a control device, the employees working in that area would be reasonably expected to open doors or windows to allow the room to clear.

Note that the reference method for determining compliance with the limitations that apply to particulate matter emissions from these facilities is a "method 5 stack test"; however, the OAM does not believe that such a test is necessary to demonstrate compliance at this time.

Conditions D.3.1 and D.4.1 (Particulate Matter (PM)) have been rearranged to better illustrate that the specific process weight rates are shown as examples or guidelines, not limitations to process throughput. The conditions are now as follows:

D.3.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the woodworking facilities shall ~~not exceed 7.95 pounds per hour for the Plant 1 shop and 7.51 pounds per hour for the Plant 2 shop when operating at process weight rates of 5374 pounds per hour and 4937 pounds per hour, respectively.~~

~~The pounds per hour limitation was~~ **be** calculated with the following equation:

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

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

At process weight rates of 5374 pounds per hour for the Plant 1 shop and 4937 pounds per hour for the Plant 2 shop, the allowable PM emission rate shall not exceed 7.51 pounds per hour and 7.95 pounds per hour, respectively.

D.4.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the woodworking facilities shall ~~not exceed 5.57 pounds per hour for the Plant 6 shop and 2.34 pounds per hour for the Plant 7 shop when operating at process weight rates of 3163 pounds per hour and 866 pounds per hour, respectively.~~

~~The pounds per hour limitation was~~ **be** calculated with the following equation:

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

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

At process weight rates of 3163 pounds per hour for the Plant 6 shop and 866 pounds per hour for the Plant 7 shop, the allowable PM emission rate shall not exceed 5.57 pounds per hour and 2.34 pounds per hour, respectively.

The sieve analysis was conducted on a sample obtained by vacuum from the waste stream before reaching the baghouse. However, there is no assurance that this collection method resulted in a representative sample, or that the process was being operated to produce the maximum rate possible of PM emissions, or that accurate measurements were taken of the amount of lumber processed or the total quantity of PM generated. Also, the amount of PM collected by the baghouse does not include any material that was not captured by the system or any PM-10 that passed through the filter. If the source would like to prove that the baghouses are not necessary for the woodworking operations to stay in compliance with the PM limit then a performance test can be conducted.

The visible emission notations are used to indicate compliance with 326 IAC 5-1 and 326 IAC 6, without the requirement to have a person on site trained in opacity measurement. This requirement is designed as a trigger that the source perform some corrective action on the facility if visible emissions are abnormal, to ensure continuous compliance with emission limitations. It has not been demonstrated sufficiently that the dust collectors and cyclones are not needed for the woodworking operations to stay in compliance. Therefore, the visible emission observations and control device inspections are required for the woodworking operations. Note that visible emission notations and quarterly inspections are only required when emissions are vented to the outside atmosphere.

Comment 15:

Section D.5 (facility operation conditions for the welding operations) should be deleted. Data for insignificant activities need not be provided in the permit application, 326 IAC 2-7-4(e). Therefore, a Part 70 permit may not contain limitations or standards applicable to insignificant activities unless a specific rule applies. Rule 6-3 does not apply to processes with a process wight rate less than 100, lbs/hour. Section D.5 is therefore unauthorized by Rule 2-7.

Response 15:

326 IAC 6-3 is applicable to all process operations with PM emissions that are not otherwise regulated by 326 IAC 6-1; no minimum process weight rate is stated in the rule. There has been no change to Section D.5.

Comment 16:

VOC and Particulate Emission Calculations (TSD Appendix) incorrectly states that units are “homes” manufactured. Units are “floors” manufactured.

Response 16:

The source uses the term “floor” to describe the production of a home unit; single wide homes consist of one “floor” and double wide homes include two “floors”. The unit description has been changed on the revised HAPs spreadsheets, and in the revised METHODOLOGY for the VOC and particulate emissions, included as Page 3 of 3 in the TSD Addendum Appendix. As explained in Response 1, no change will be made to the original TSD.

Upon further review, the OAM has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted).

1. Condition C.3 (Opacity) has been modified for consistency with the November 1, 1998 update to 326 IAC 5. The condition is now as follows:

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 ~~(Visible Emissions~~ **Opacity** Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), ~~visible emissions~~ **opacity** shall meet the following, unless otherwise stated in this permit:

(a) ~~Visible emissions~~ **Opacity** shall not exceed an average of forty percent (40%) ~~opacity in twenty four (24) consecutive readings,~~ **in any one (1) six (6)-minute averaging period** as determined in 326 IAC 5-1-4.

(b) ~~Visible emissions~~ **Opacity** shall not exceed sixty percent (60%) ~~opacity~~ 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.

2. Paint booths SG1 and SG2 were constructed at the same time and essentially act as one facility. The PTE for the combined booths is greater than 15 pounds per day, therefore, 326 IAC 8-2-9 should apply. The current coatings are in compliance. Conditions have been changed and added to Section D.2 as follows:

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8]

~~Any change or modification which may increase potential emissions from the surface coating operation, shall require prior approval from the OAM to determine applicability requirements of 326 IAC 8, before such change may occur.~~ **The volatile organic compound (VOC) content of air dried coatings applied to metal frames shall be limited to 3.5 pounds of VOC per gallon of coating less water as delivered to the applicator.**

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

D.2.4 Volatile Organic Compounds

Compliance with the VOC content and usage limitations contained in Condition D.2.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) using formulation data supplied by the coating manufacturer. However, IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

~~D.2.7~~ **D.2.8** Record Keeping Requirements

(a) To document compliance with Condition D.2.1, the Permittee shall maintain data sheets confirming that the VOC content of each coating used is less than 3.5 pounds per gallon.

(b) To document compliance with Condition ~~D.2.5~~ **D.2.6** and ~~D.2.6~~ **D.2.7**, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Other conditions in Section D.2 have also been renumbered.

3. Conditions D.3.7 (Broken Bag or Failure Detection) has been modified to provide clarification for the operation of single compartment baghouses. Condition D.3.7 and Condition D.4.7 (Cyclone Failure Detection) have been modified to clarify that the emergency provisions of the Title V rule and general permit condition may take precedence if applicable.

D.3.7 Broken **or Failed** Bag ~~or Failure~~ Detection

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. ~~For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.~~ ~~(b)~~ Within eight (8) 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) hours of discovery of the failure and shall include a timetable for completion. **Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.4.7 Cyclone Failure Detection

In the event that cyclone failure has been observed:

~~(a)~~ The affected cyclone will be shut down immediately until the failed unit has been repaired or replaced. ~~(b)~~ Within eight (8) 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) hours of discovery of the failure and shall include a timetable for completion. **Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**

Appendix A: Emissions Calculations
VOC and Particulate
From Single Wide Home Production Line, Including Spray Coating of Interiors

Company Name: Patriot Homes, Inc.
Address City IN Zip: 57420 CR 3 S., Elkhart, IN 46517
Permit No/Plt ID: T039-7535-00105
Reviewer: V. Cordell
Date: June 24, 1998

Booth ID	Material	Density* (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)**	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency ***
PL1	924 Rebond Adhesive	8.00	53.00%	51.00%	2.00%	49.00%	48.50%	0.0560	0.778	0.31	0.16	0.007	0.17	0.03	0.00	0.33	100%
	Acrylic Seam Sealr(5504)	8.20	45.50%	0.00%	45.50%	0.00%	48.10%	0.0870	0.778	3.73	3.73	0.253	6.06	1.11	0.00	7.76	100%
	PVC Cement VC9963	7.96	73.00%	0.05%	72.95%	0.05%	27.00%	0.0020	0.778	5.81	5.81	0.009	0.22	0.04	0.00	21.51	100%
	Chem Caulk 900	10.18	6.10%	0.00%	6.10%	0.00%	91.40%	0.0050	0.778	0.62	0.62	0.002	0.06	0.01	0.00	0.68	100%
	Con-Bond 773	6.70	79.50%	0.00%	79.50%	0.00%	13.60%	0.0020	0.778	5.33	5.33	0.008	0.20	0.04	0.00	39.17	100%
	Dap Spray'N'Go	6.11	91.30%	0.01%	91.30%	0.01%	8.72%	0.0290	0.778	5.58	5.58	0.126	3.02	0.55	0.03	63.95	45%
	Duraseal Adh. Sealant	13.60	2.00%	0.00%	2.00%	0.00%	98.00%	0.0860	0.778	0.27	0.27	0.018	0.44	0.08	0.00	0.28	100%
	F2100	8.67	3.00%	3.00%	0.00%	3.10%	96.90%	2.8080	0.778	0.00	0.00	0.000	0.00	0.00	0.00	0.00	100%
	F2100A	10.24	0.00%	0.00%	0.00%	0.00%	100.00%	2.7600	0.778	0.00	0.00	0.000	0.00	0.00	0.00	0.00	100%
	FS100	9.30	28.00%	0.00%	28.00%	0.00%	72.00%	0.1020	0.778	2.60	2.60	0.207	4.96	0.91	0.00	3.62	100%
	Glue (GP17)	9.44	64.00%	64.00%	0.00%	72.00%	28.00%	0.9340	0.778	0.00	0.00	0.000	0.00	0.00	0.00	0.00	100%
	Grundy Cold Cement	8.80	23.31%	0.00%	23.31%	0.00%	68.46%	5.0000	0.778	2.05	2.05	7.979	191.51	34.95	0.00	3.00	100%
	Grundy Plastic Cement	9.60	19.71%	0.00%	19.71%	0.00%	70.90%	1.5000	0.778	1.89	1.89	2.208	53.00	9.67	0.00	2.67	100%
	Magic Seal	7.60	37.20%	0.00%	37.20%	0.00%	60.00%	0.3170	0.778	2.83	2.83	0.697	16.73	3.05	0.00	4.71	100%
	Oatey Extra SP Blk Cem't	7.10	76.00%	0.00%	76.00%	0.00%	24.00%	0.1050	0.778	5.40	5.40	0.441	10.58	1.93	0.00	22.48	100%
	Oatey Flowguard Gold Adh.	7.96	73.40%	0.00%	73.40%	0.00%	26.60%	0.0630	0.778	5.84	5.84	0.286	6.87	1.25	0.00	21.96	100%
	Panel Hold Adhesive	9.18	20.00%	0.00%	20.00%	0.00%	80.00%	0.0650	0.778	1.84	1.84	0.093	2.23	0.41	0.00	2.30	100%
	Pemco 5100 Adhesive	9.45	0.00%	0.00%	0.00%	0.00%	100.00%	0.2300	0.778	0.00	0.00	0.000	0.00	0.00	0.00	0.00	100%
	Rectorseal No. 5	10.80	23.00%	0.00%	23.00%	0.00%	76.00%	0.0040	0.778	2.48	2.48	0.008	0.19	0.03	0.00	3.27	100%
	Red Devil Spackling	3.40	47.00%	12.00%	35.00%	5.00%	68.00%	0.0320	0.778	1.25	1.19	0.030	0.71	0.13	0.00	1.75	100%
	Sheetrock Joint 252511	15.05	28.55%	28.50%	0.05%	51.33%	48.58%	0.1070	0.778	0.02	0.01	0.001	0.02	0.00	0.00	0.02	100%
	Sta'-Put Adhesive	7.00	70.00%	0.00%	70.00%	0.00%	30.00%	0.1410	0.778	4.90	4.90	0.538	12.90	2.35	0.00	16.33	100%
	Stix 309	8.10	37.00%	30.00%	7.00%	30.00%	63.00%	0.8100	0.778	0.81	0.57	0.357	8.58	1.57	0.00	0.90	100%
	Vapor Barrier (VB55)	9.20	65.00%	65.00%	0.00%	70.00%	30.00%	3.5860	0.778	0.00	0.00	0.000	0.00	0.00	0.00	0.00	100%
	Weld-On 773	7.25	80.00%	0.00%	80.00%	0.00%	20.00%	0.1850	0.778	5.80	5.80	0.835	20.04	3.66	0.00	29.00	100%
	Quick Clean 99	8.50	90.00%	0.00%	90.00%	0.00%	9.00%	0.0010	0.778	7.65	7.65	0.006	0.14	0.03	0.00	85.00	100%
	Panel Hold Cleaner	6.28	100.00%	0.00%	100.00%	0.00%	0.00%	0.0240	0.778	6.28	6.28	0.117	2.81	0.51	0.00	N/A	100%
	GC-33 (Gun Cleaner)****	8.19	100.00%	58.00%	42.00%	0.00%	0.00%	0.0070	0.778	3.44	3.44	0.019	0.45	0.08	0.00	N/A	100%
	Alpha Glue Cleaner	7.91	100.00%	0.00%	100.00%	0.00%	0.00%	0.0040	0.778	7.91	7.91	0.025	0.59	0.11	0.00	N/A	100%
									State Potential Emissions:			14.269	342.46	**62.50**	**0.03**		

METHODOLOGY

SEE: TSD Appendix Page 3 of 5 (Paint Booths SG1 and SG2, Paint Areas SG3 and SG4, and Installation Area PL7) for additional Methodology.

**** Components of GC-33 are 100% volatile but only 38 - 42% as combined will volatilize in actual use, according to analysis provided by supplier.

Appendix A: Emissions Calculations
VOC and Particulate
From Double Wide Home Production Line

Company Name: Patriot Homes, Inc.
Address City IN Zip: 57420 CR 3 S., Elkhart, IN 46517
Permit No/Plt ID: T039-7535-00105
Reviewer: V. Cordell
Date: June 24, 1998

Booth ID	Material	Density* (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)**	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency ***
PL2	924 Rebond Adhesive	8.00	53.00%	51.00%	2.00%	49.00%	48.50%	0.0560	0.400	0.31	0.16	0.004	0.09	0.02	0.00	0.33	100%
	Dap Acrylic Latex Caulk	14.40	13.84%	12.77%	1.07%	21.43%	76.05%	0.1150	0.400	0.20	0.15	0.007	0.17	0.03	0.00	0.20	100%
	PVC Cement VC9963	7.96	73.00%	0.05%	72.95%	0.05%	27.00%	0.0040	0.400	5.81	5.81	0.009	0.22	0.04	0.00	21.51	100%
	Durabond Tile Grout Sealr	8.30	90.10%	84.00%	6.10%	84.00%	10.00%	0.0580	0.400	3.16	0.51	0.012	0.28	0.05	0.00	5.06	100%
	Con-Bond 773	6.70	79.50%	0.00%	79.50%	0.00%	13.60%	0.0020	0.400	5.33	5.33	0.004	0.10	0.02	0.00	39.17	100%
	Dap Spray'N'Go	6.11	91.30%	0.01%	91.30%	0.01%	8.72%	0.0240	0.400	5.58	5.58	0.054	1.29	0.23	0.01	63.95	45%
	Duraseal Adh. Sealant	13.60	2.00%	0.00%	2.00%	0.00%	98.00%	0.0360	0.400	0.27	0.27	0.004	0.09	0.02	0.00	0.28	100%
	F2100	8.67	3.00%	3.00%	0.00%	3.10%	96.90%	2.6470	0.400	0.00	0.00	0.000	0.00	0.00	0.00	0.00	100%
	FS100	9.30	28.00%	0.00%	28.00%	0.00%	72.00%	1.0000	0.400	2.60	2.60	1.042	25.00	4.56	0.00	3.62	100%
	Glue (GP17)	9.44	64.00%	64.00%	0.00%	72.00%	28.00%	0.8590	0.400	0.00	0.00	0.000	0.00	0.00	0.00	0.00	100%
	Grundy Cold Cement	8.80	23.31%	0.00%	23.31%	0.00%	68.46%	2.5000	0.400	2.05	2.05	2.051	49.23	8.98	0.00	3.00	100%
	Grundy Plastic Cement	9.60	19.71%	0.00%	19.71%	0.00%	70.90%	0.2460	0.400	1.89	1.89	0.186	4.47	0.82	0.00	2.67	100%
	Magic Seal	7.60	37.20%	0.00%	37.20%	0.00%	60.00%	0.2540	0.400	2.83	2.83	0.287	6.89	1.26	0.00	4.71	100%
	Oatey Extra SP Blk Cem't	7.10	76.00%	0.00%	76.00%	0.00%	24.00%	0.0330	0.400	5.40	5.40	0.071	1.71	0.31	0.00	22.48	100%
	Oatey Flowguard Gold Adh.	7.96	73.40%	0.00%	73.40%	0.00%	26.60%	0.0630	0.400	5.84	5.84	0.147	3.53	0.64	0.00	21.96	100%
	Panel Hold Adhesive	9.18	20.00%	0.00%	20.00%	0.00%	80.00%	0.1430	0.400	1.84	1.84	0.105	2.52	0.46	0.00	2.30	100%
	Panel NU	7.16	54.34%	44.42%	9.92%	38.20%	46.09%	0.0280	0.400	1.15	0.71	0.008	0.19	0.03	0.00	1.54	100%
	Pemco 5100 Adhesive	9.45	0.00%	0.00%	0.00%	0.00%	100.00%	0.4340	0.400	0.00	0.00	0.000	0.00	0.00	0.00	0.00	100%
	Rectorseal No. 5	10.80	23.00%	0.00%	23.00%	0.00%	76.00%	0.0020	0.400	2.48	2.48	0.002	0.05	0.01	0.00	3.27	100%
	Red Devil Spackling	3.40	47.00%	12.00%	35.00%	5.00%	68.00%	0.1230	0.400	1.25	1.19	0.059	1.41	0.26	0.00	1.75	100%
	Sheetrock Joint 252860	14.22	33.22%	33.16%	0.06%	56.56%	45.36%	19.0480	0.400	0.02	0.01	0.065	1.56	0.28	0.00	0.02	100%
	Stix 309	8.10	37.00%	30.00%	7.00%	30.00%	63.00%	0.8100	0.400	0.81	0.57	0.184	4.41	0.80	0.00	0.90	100%
	Vapor Barrier (VB55)	9.20	65.00%	65.00%	0.00%	70.00%	30.00%	2.2500	0.400	0.00	0.00	0.000	0.00	0.00	0.00	0.00	100%
	Weld-On 771	7.25	80.00%	0.00%	80.00%	0.00%	20.00%	0.0740	0.400	5.80	5.80	0.172	4.12	0.75	0.00	29.00	100%
	Quick Clean 99	8.50	90.00%	0.00%	90.00%	0.00%	9.00%	0.0010	0.400	7.65	7.65	0.003	0.07	0.01	0.00	85.00	100%
	Panel Hold Cleaner	6.28	100.00%	0.00%	100.00%	0.00%	0.00%	0.0240	0.400	6.28	6.28	0.060	1.45	0.26	0.00	N/A	100%
	GC-33 (Gun Cleaner)****	8.19	100.00%	58.00%	42.00%	0.00%	0.00%	0.0070	0.400	3.44	3.44	0.010	0.23	0.04	0.00	N/A	100%
	Alpha Glue Cleaner	7.91	100.00%	0.00%	100.00%	0.00%	0.00%	0.0040	0.400	7.91	7.91	0.013	0.30	0.06	0.00	N/A	100%
	Kwik Seal Tub/Tile Caulk	12.06	28.13%	25.40%	2.73%	36.80%	59.39%	0.0090	0.400	0.52	0.33	0.001	0.03	0.01	0.00	0.55	100%
	Panel NU	7.16	54.34%	44.42%	9.92%	38.20%	46.09%	0.0280	0.400	1.15	0.71	0.008	0.19	0.03	0.00	1.54	100%
	Rectorseal No. 100 Virgin	11.02	0.00%	0.00%	0.00%	0.00%	100.00%	0.0020	0.400	0.00	0.00	0.000	0.00	0.00	0.00	0.00	100%
									State Potential Emissions			4.567	109.61	**20.00**	0.01		

METHODOLOGY

SEE: TSD Appendix Page 3 of 5 (Paint Booths SG1 and SG2, Paint Areas SG3 and SG4, and Installation Area PL7) for additional Methodology.

**** Components of GC-33 are 100% volatile but only 38 - 42% as combined will volatilize in actual use, according to analysis provided by supplier.

Appendix A: Emissions Calculations
VOC and Particulate
From Paint Booths SG1 and SG2, Paint Areas SG3 and SG4, and Installation Area PL7

Company Name: Patriot Homes, Inc.
Address City IN Zip: 57420 CR 3 S., Elkhart, IN 46517
Permit No/Plt ID: T039-7535-00105
Reviewer: V. Cordell
Date: July 14, 1998

Frame paint booths

Booth ID	Material	Density* (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)**	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency ***
SG1	Frame Paint (6474-D)	8.43	74.30%	72.30%	2.00%	73.04%	25.70%	3.1390	0.6875	0.63	0.17	0.364	8.73	1.59	11.26	0.66	45%
SG2	Frame Paint (6474-D)	8.43	74.30%	72.30%	2.00%	73.04%	25.70%	3.1390	0.6875	0.63	0.17	0.364	8.73	1.59	11.26	0.66	45%
									State Potential Emissions:			0.728	17.46	**3.19**	**22.53**		

Double wide interior paint areas

Booth ID	Material	Density* (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)**	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency ***
SG3	PROMAR Interior Latex White	11.12	53.20%	51.80%	1.40%	69.30%	28.70%	12.0000	0.400	0.51	0.16	0.747	17.93	3.27	60.18	0.54	45%
SG4	PROMAR Interior Latex White	11.12	53.20%	51.80%	1.40%	69.30%	28.70%	12.0000	0.400	0.51	0.16	0.747	17.93	3.27	60.18	0.54	45%
									State Potential Emissions:			1.495	35.87	**6.55**	**120.35**		

Floor, cabinet, and countertop installation

Booth ID	Material	Density* (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)**	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency ***
PL7	IN.T.A.C. Floor Sealer 05P	9.00	50.00%	0.00%	50.00%	20.00%	80.00%	0.1420	1.222	5.63	4.50	0.781	18.74	3.42	0.00	5.63	100%
	Quick Clean 99	8.50	90.00%	0.00%	90.00%	0.00%	9.00%	0.0010	1.222	7.65	7.65	0.009	0.22	0.04	0.00	85.00	100%
									State Potential Emissions:			0.790	18.96	**3.46**	**0.00**		

METHODOLOGY

* Units are homes manufactured.

** All materials are "as supplied".

*** Used 100% transfer efficiency for sealant. Used AP-42 transfer efficiency for airless application for spray-applied paints.

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

HAP Emission Calculations
Single Wide Home Production Line, PL1

Company Name: Patriot Homes, Inc.
Plant Location: 57420 CR 3 S., Elkhart, IN 46517
County: Elkhart
Permit No./Plt ID: T039-7432-00282
Permit Reviewer: V. Cordell
Date: December 22, 1997

Booth ID	Material	Density* (Lb/Gal)	Gal's of Material	Maximum units per hour **	Weight % Ethyl Benzene	Weight % Glycol Ethers	Weight % Hexane	Weight % Methyl Ethyl Ketone	Weight % Toluene	Weight % 2,4-Toluene Diisocyanate	Weight % Xylene	Ethyl Benzene Emissions (ton/yr)	Glycol Ether Emissions (ton/yr)	Hexane Emissions (ton/yr)	Methyl Ethyl Ketone Emissions (ton/yr)	Toluene Emissions (ton/yr)	2,4-Toluene Diisocyanate Emissions (ton/yr)	Xylene Emissions (ton/yr)
PL1	Acrylic Seam Sealer	8.20	0.087	0.778					44.60%			0.00	0.00	0.00	0.00	1.08	0.00	0.00
	PVC Cement VC9963	7.96	0.002	0.778				48.00%	48.00%			0.00	0.00	0.00	0.03	0.03	0.00	0.00
	Chem Caulk 900	10.18	0.005	0.778	0.90%					0.50%	4.10%	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Con-Bond 773	6.70	0.002	0.778					18.60%			0.00	0.00	0.00	0.00	0.01	0.00	0.00
	Dap Spray'N'Go	6.11	0.029	0.778					20.00%		5.00%	0.00	0.00	0.00	0.00	0.12	0.00	0.03
	FS 100	9.30	0.102	0.778			13.00%		8.00%			0.00	0.00	0.42	0.00	0.26	0.00	0.00
	Magic Seal	7.60	0.317	0.778							25.00%	0.00	0.00	0.00	0.00	0.00	0.00	2.05
	Oatey Extra SP Blk Cem't	7.10	0.105	0.778				80.00%				0.00	0.00	0.00	2.03	0.00	0.00	0.00
	Oatey Flowguard Gold	7.96	0.063	0.778				10.00%				0.00	0.00	0.00	0.17	0.00	0.00	0.00
	Rectorseal No. 5	10.80	0.004	0.778		23.00%						0.00	0.03	0.00	0.00	0.00	0.00	0.00
	Weld-On 773	7.25	0.185	0.778				80.00%				0.00	0.00	0.00	3.66	0.00	0.00	0.00
	GC-33	8.19	0.007	0.778		25.20%						0.00	0.05	0.00	0.00	0.00	0.00	0.00
	Alpha	7.91	0.004	0.778		100.00%						0.00	0.11	0.00	0.00	0.00	0.00	0.00
	State Potential HAPs from PL1:											**0.00**	**0.19**	**0.42**	**5.89**	**1.50**	**0.00**	**2.09**

Booth ID	Material	Density* (Lb/Gal)	Gal's of Material (gal/unit)	Maximum units per hour **	Weight % Cyanide Compounds	Weight % 4,4'-Diphenyl-methane Diisocyanate	Weight % Ethylene Glycol	Weight % Methylene Chloride	Weight % Vinyl Acetate	Weight % Xylene Glycol		Cyanide Compounds Emissions (ton/yr)	4,4'-Diphenyl-methane Diiso-cyanate Emissions (ton/yr)	Ethylene Glycol Emissions (ton/yr)	Methylene chloride Emissions (ton/yr)	Vinyl Acetate Emissions (ton/yr)	Xylene Glycol Emissions (ton/yr)
PL1 cont.	F2100A	10.18	0.005	0.778	50.00%	50.00%						0.09	0.09	0.00	0.00	0.00	0.00
	Panel Hold Adhesive	9.18	0.065	0.778		15.00%						0.00	0.31	0.00	0.00	0.00	0.00
	Pemco 5100 Adhesive	9.45	0.230	0.778	40.00%	20.00%						2.96	1.48	0.00	0.00	0.00	0.00
	Red Devil Spackling	3.20	0.032	0.778			1.60%		3.40%			0.00	0.00	0.01	0.00	0.01	0.00
	Sheetrock Joint Comp.	15.05	0.107	0.778			1.00%					0.00	0.00	0.05	0.00	0.00	0.00
	Sta'-Put Adhesive	7.00	0.141	0.778				55.00%				0.00	0.00	0.00	1.85	0.00	0.00
	Dap Kwick Seal Tub/Tile	9.60	1.500	0.778			3.00%			5.00%		0.00	0.00	1.47	0.00	0.00	2.45
	State Potential HAPs from PL1 (cont.):											**3.05**	**1.87**	**1.53**	**1.85**	**0.01**	**2.45**

TOTAL STATE POTENTIAL HAPs from PL1: **20.85 tons/yr**

METHODOLOGY

* All materials "as supplied".

** Units are homes manufactured.

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

Note: The Grundy cements contain 25% asbestos; however, because they are cements the transfer efficiency is 100% and there is no HAP release.

HAP Emission Calculations - continued
Double Wide Home Production Line, PL2

Company Name: Patriot Homes, Inc.
Plant Location: 57420 CR 3 S., Elkhart, IN 46517
County: Elkhart
Permit No./Plt ID: T039-7432-00282
Permit Reviewer: V. Cordell
Date: December 22, 1997

Booth ID	Material	Density* (Lb/Gal)	Gal's of Material	Maximum units per hour **	Weight % Ethyl Benzene	Weight % Glycol Ethers	Weight % Hexane	Weight % Methyl Ethyl Ketone	Weight % Toluene	Weight % 2,4-Toluene Diisocyanate	Weight % Xylene	Ethyl Benzene Emissions (ton/yr)	Glycol Ether Emissions (ton/yr)	Hexane Emissions (ton/yr)	Methyl Ethyl Ketone Emissions (ton/yr)	Toluene Emissions (ton/yr)	2,4-Toluene Diisocyanate Emissions (ton/yr)	Xylene Emissions (ton/yr)
PL2	PVC Cement VC9963	7.96	0.002	0.400				48.00%	48.00%			0.00	0.00	0.00	0.01	0.01	0.00	0.00
	Con-Bond 773	6.70	0.002	0.400					18.60%			0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dap Spray'N'Go	6.11	0.029	0.400					20.00%		5.00%	0.00	0.00	0.00	0.00	0.06	0.00	0.02
	FS 100	9.30	0.102	0.400			13.00%		8.00%			0.00	0.00	0.22	0.00	0.13	0.00	0.00
	Magic Seal	7.60	0.317	0.400							25.00%	0.00	0.00	0.00	0.00	0.00	0.00	1.06
	Oatey Extra SP Blk Cem't	7.10	0.105	0.400				80.00%				0.00	0.00	0.00	1.04	0.00	0.00	0.00
	Oatey Flowguard Gold	7.96	0.063	0.400				10.00%				0.00	0.00	0.00	0.09	0.00	0.00	0.00
	Rectorseal No. 5	10.80	0.002	0.400		23.00%						0.00	0.01	0.00	0.00	0.00	0.00	0.00
	Weld-On 771	7.25	0.185	0.400				80.00%				0.00	0.00	0.00	1.88	0.00	0.00	0.00
	GC-33	8.19	0.007	0.400		25.20%						0.00	0.03	0.00	0.00	0.00	0.00	0.00
	Alpha	7.91	0.004	0.400		100.00%						0.00	0.06	0.00	0.00	0.00	0.00	0.00
	State Potential HAPs from PL2:											**0.00**	**0.09**	**0.22**	**3.03**	**0.21**	**0.00**	**1.07**

Booth ID	Material	Density* (Lb/Gal)	Gal's of Material (gal/unit)	Maximum units per hour **	Weight % Cyanide Compounds	Weight % 4,4'-Diphenyl-methane Diisocyanate	Weight % Ethylene Glycol	Weight % Methylene Chloride	Weight % Vinyl Acetate	Weight % Xylene Glycol		Cyanide Compounds Emissions (ton/yr)	4,4'-Diphenyl-methane Diiso-cyanate Emissions (ton/yr)	Ethylene Glycol Emissions (ton/yr)	Methylene chloride Emissions (ton/yr)	Vinyl Acetate Emissions (ton/yr)	Xylene Glycol Emissions (ton/yr)
PL2	F2100A	10.18	0.005	0.400	50.00%	50.00%						0.04	0.04	0.00	0.00	0.00	0.00
cont.	Panel Hold Adhesive	9.18	0.065	0.400		15.00%						0.00	0.16	0.00	0.00	0.00	0.00
	Pemco 5100 Adhesive	9.45	0.230	0.400	40.00%	20.00%						1.52	0.76	0.00	0.00	0.00	0.00
	Red Devil Spackling	3.20	0.032	0.400			1.60%		3.40%			0.00	0.00	0.00	0.00	0.01	0.00
	Sheetrock Joint Comp.	15.05	0.107	0.400			1.00%					0.00	0.00	0.03	0.00	0.00	0.00
	Sta'-Put Adhesive	7.00	0.141	0.400				55.00%				0.00	0.00	0.00	0.95	0.00	0.00
	Dap Kwick Seal Tub/Tile	9.60	1.500	0.400			3.00%			5.00%		0.00	0.00	0.76	0.00	0.00	1.26
	State Potential HAPs from PL2 (cont.):											**1.57**	**0.96**	**0.79**	**0.95**	**0.01**	**1.26**

TOTAL STATE POTENTIAL HAPs from PL2 : **10.16 tons/yr**

METHODOLOGY

* All materials "as supplied".

** Units are homes manufactured.

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

Note: The Grundy cements contain 25% asbestos; however, because they are cements the transfer efficiency is 100% and there is no HAP release.

HAP Emission Calculations
Single Wide Home Production Line, PL1

Company Name: Patriot Homes, Inc.
Plant Location: 57420 CR 3 S., Elkhart, IN 46517
County: Elkhart
Permit No./Plt ID: T039-7432-00282
Permit Reviewer: V. Cordell
Date: January 20, 1999

Booth ID	Material	Density* (Lb/Gal)	Gal's of Material	Maximum units per hour **	Weight % Ethyl Benzene	Weight % Glycol Ethers	Weight % Hexane	Weight % Methyl Ethyl Ketone	Weight % Toluene	Weight % 2,4-Toluene Diisocyanate	Weight % Xylene	Ethyl Benzene Emissions (ton/yr)	Glycol Ether Emissions (ton/yr)	Hexane Emissions (ton/yr)	Methyl Ethyl Ketone Emissions (ton/yr)	Toluene Emissions (ton/yr)	2,4-Toluene Diisocyanate Emissions (ton/yr)	Xylene Emissions (ton/yr)
PL1	Acrylic Seam Sealer	8.20	0.087	0.778					44.60%			0.00	0.00	0.00	0.00	1.08	0.00	0.00
	PVC Cement VC9963	7.96	0.002	0.778				48.00%				0.00	0.00	0.00	0.03	0.00	0.00	0.00
	Chem Caulk 900	10.18	0.005	0.778	0.90%					0.50%	4.10%	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	Con-Bond 773	6.70	0.002	0.778					18.60%			0.00	0.00	0.00	0.00	0.01	0.00	0.00
	Dap Spray'N'Go	6.11	0.029	0.778					20.00%		5.00%	0.00	0.00	0.00	0.00	0.12	0.00	0.03
	FS 100	9.30	0.102	0.778			13.00%		8.00%			0.00	0.00	0.42	0.00	0.26	0.00	0.00
	Magic Seal	7.60	0.317	0.778							25.00%	0.00	0.00	0.00	0.00	0.00	0.00	2.05
	Oatey Extra SP Blk Cem't	7.10	0.105	0.778				80.00%				0.00	0.00	0.00	2.03	0.00	0.00	0.00
	Oatey Flowguard Gold	7.96	0.063	0.778				10.00%				0.00	0.00	0.00	0.17	0.00	0.00	0.00
	Rectorseal No. 5	10.80	0.004	0.778		23.00%						0.00	0.03	0.00	0.00	0.00	0.00	0.00
	Weld-On 773	7.16	0.185	0.778				75.00%				0.00	0.00	0.00	3.39	0.00	0.00	0.00
	GC-33	8.19	0.007	0.778		25.20%						0.00	0.05	0.00	0.00	0.00	0.00	0.00
	Alpha	7.91	0.004	0.778		100.00%						0.00	0.11	0.00	0.00	0.00	0.00	0.00
	State Potential HAPs from PL1:											**0.00**	**0.19**	**0.42**	**5.61**	**1.47**	**0.00**	**2.09**

Booth ID	Material	Density* (Lb/Gal)	Gal's of Material (gal/unit)	Maximum units per hour **	Weight % Cyanide Compounds	Weight % 4,4'-Diphenyl-methane Diisocyanate	Weight % Ethylene Glycol	Weight % Methylene Chloride	Weight % Vinyl Acetate	Weight % Xylene Glycol		Cyanide Compounds Emissions (ton/yr)	4,4'-Diphenyl-methane Diiso-cyanate Emissions (ton/yr)	Ethylene Glycol Emissions (ton/yr)	Methylene chloride Emissions (ton/yr)	Vinyl Acetate Emissions (ton/yr)	Xylene Glycol Emissions (ton/yr)
PL1 cont.	F2100A	10.18	0.005	0.778		50.00%						0.00	0.09	0.00	0.00	0.00	0.00
	Panel Hold Adhesive	9.18	0.065	0.778		15.00%						0.00	0.31	0.00	0.00	0.00	0.00
	Pemco 5100 Adhesive	9.45	0.230	0.778		20.00%						0.00	1.48	0.00	0.00	0.00	0.00
	Red Devil Spackling	3.20	0.032	0.778			1.60%		3.40%			0.00	0.00	0.01	0.00	0.01	0.00
	Sheetrock Joint Comp.	15.05	0.107	0.778			1.00%					0.00	0.00	0.05	0.00	0.00	0.00
	Sta'-Put Adhesive	7.00	0.141	0.778								0.00	0.00	0.00	0.00	0.00	0.00
	Dap Kwick Seal Tub/Tile	9.60	1.500	0.778								0.00	0.00	0.00	0.00	0.00	0.00
	State Potential HAPs from PL1 (cont.):											**0.00**	**1.87**	**0.06**	**0.00**	**0.01**	**0.00**

TOTAL STATE POTENTIAL HAPs from PL1: **11.74 tons/yr**

METHODOLOGY

* All materials "as supplied".

** Units are "floors" manufactured, one floor per single wide home; a finished "floor" includes all components for a single wide home.

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

Note: The Grundy cements contain 25% asbestos; however, because they are cements the transfer efficiency is 100% and there is no HAP release.

HAP Emission Calculations - continued
Double Wide Home Production Line, PL2

Company Name: Patriot Homes, Inc.
Plant Location: 57420 CR 3 S., Elkhart, IN 46517
County: Elkhart
Permit No./Plt ID: T039-7432-00282
Permit Reviewer: V. Cordell
Date: January 20, 1999

Booth ID	Material	Density* (Lb/Gal)	Gal's of Material	Maximum units per hour **	Weight % Ethyl Benzene	Weight % Glycol Ethers	Weight % Hexane	Weight % Methyl Ethyl Ketone	Weight % Toluene	Weight % 2,4-Toluene Diisocyanate	Weight % Xylene	Ethyl Benzene Emissions (ton/yr)	Glycol Ether Emissions (ton/yr)	Hexane Emissions (ton/yr)	Methyl Ethyl Ketone Emissions (ton/yr)	Toluene Emissions (ton/yr)	2,4-Toluene Diisocyanate Emissions (ton/yr)	Xylene Emissions (ton/yr)
PL2	PVC Cement VC9963	7.96	0.002	0.400				48.00%				0.00	0.00	0.00	0.01	0.00	0.00	0.00
	Con-Bond 773	6.70	0.002	0.400					18.60%			0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dap Spray'N'Go	6.11	0.029	0.400					20.00%		5.00%	0.00	0.00	0.00	0.00	0.06	0.00	0.02
	FS 100	9.30	0.102	0.400			13.00%		8.00%			0.00	0.00	0.22	0.00	0.13	0.00	0.00
	Magic Seal	7.60	0.317	0.400							25.00%	0.00	0.00	0.00	0.00	0.00	0.00	1.06
	Oatey Extra SP Blk Cem't	7.10	0.105	0.400				80.00%				0.00	0.00	0.00	1.04	0.00	0.00	0.00
	Oatey Flowguard Gold	7.96	0.063	0.400				10.00%				0.00	0.00	0.00	0.09	0.00	0.00	0.00
	Rectorseal No. 5	10.80	0.002	0.400		23.00%						0.00	0.01	0.00	0.00	0.00	0.00	0.00
	Weld-On 771	7.25	0.185	0.400				65.00%				0.00	0.00	0.00	1.53	0.00	0.00	0.00
	GC-33	8.19	0.007	0.400		25.20%						0.00	0.03	0.00	0.00	0.00	0.00	0.00
	Alpha	7.91	0.004	0.400		100.00%						0.00	0.06	0.00	0.00	0.00	0.00	0.00
	State Potential HAPs from PL2:											**0.00**	**0.09**	**0.22**	**2.67**	**0.20**	**0.00**	**1.07**

Booth ID	Material	Density* (Lb/Gal)	Gal's of Material (gal/unit)	Maximum units per hour **	Weight % Cyanide Compounds	Weight % 4,4'-Diphenyl-methane Diisocyanate	Weight % Ethylene Glycol	Weight % Methylene Chloride	Weight % Vinyl Acetate	Weight % Xylene Glycol		Cyanide Compounds Emissions (ton/yr)	4,4'-Diphenyl-methane Diiso-cyanate Emissions (ton/yr)	Ethylene Glycol Emissions (ton/yr)	Methylene chloride Emissions (ton/yr)	Vinyl Acetate Emissions (ton/yr)	Xylene Glycol Emissions (ton/yr)
PL2	F2100A	10.18	0.005	0.400		50.00%						0.00	0.04	0.00	0.00	0.00	0.00
cont.	Panel Hold Adhesive	9.18	0.065	0.400		15.00%						0.00	0.16	0.00	0.00	0.00	0.00
	Pemco 5100 Adhesive	9.45	0.230	0.400		20.00%						0.00	0.76	0.00	0.00	0.00	0.00
	Red Devil Spackling	3.20	0.032	0.400			1.60%		3.40%			0.00	0.00	0.00	0.00	0.01	0.00
	Sheetrock Joint Comp.	15.05	0.107	0.400			1.00%					0.00	0.00	0.03	0.00	0.00	0.00
	Sta'-Put Adhesive	7.00	0.141	0.400								0.00	0.00	0.00	0.00	0.00	0.00
	Dap Kwick Seal Tub/Tile	9.60	1.500	0.400								0.00	0.00	0.00	0.00	0.00	0.00
	State Potential HAPs from PL2 (cont.):											**0.00**	**0.96**	**0.03**	**0.00**	**0.01**	**0.00**

TOTAL STATE POTENTIAL HAPs from PL2 : **5.25 tons/yr**

METHODOLOGY

* All materials "as supplied".

** Units are "floors" manufactured, two floors per double wide home; a finished "floor" includes all components for 1/2 of a double wide home.

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

Note: The Grundy cements contain 25% asbestos; however, because they are cements the transfer efficiency is 100% and there is no HAP release.

Appendix A: Emissions Calculations
VOC and Particulate
From Paint Booths SG1 and SG2, Paint Areas SG3 and SG4, and Installation Area PL7

Company Name: Patriot Homes, Inc.
Address City IN Zip: 57420 CR 3 S., Elkhart, IN 46517
Permit No/Plt ID: T039-7535-00105
Reviewer: V. Cordell
Date: January 21, 1998

Frame paint booths

Booth ID	Material	Density* (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)**	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency ***
SG1	Frame Paint (6474-D)	8.43	74.30%	72.30%	2.00%	73.04%	25.70%	3.1390	0.6875	0.63	0.17	0.364	8.73	1.59	11.26	0.66	45%
SG2	Frame Paint (6474-D)	8.43	74.30%	72.30%	2.00%	73.04%	25.70%	3.1390	0.6875	0.63	0.17	0.364	8.73	1.59	11.26	0.66	45%
									State Potential Emissions:			0.728	17.46	**3.19**	**22.53**		

Double wide interior paint areas

Booth ID	Material	Density* (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)**	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency ***
SG3	PROMAR Interior Latex White	11.12	53.20%	51.80%	1.40%	69.30%	28.70%	12.0000	0.400	0.51	0.16	0.747	17.93	3.27	60.18	0.54	45%
SG4	PROMAR Interior Latex White	11.12	53.20%	51.80%	1.40%	69.30%	28.70%	12.0000	0.400	0.51	0.16	0.747	17.93	3.27	60.18	0.54	45%
									State Potential Emissions:			1.495	35.87	**6.55**	**120.35**		

Floor, cabinet, and countertop installation

Booth ID	Material	Density* (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)**	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency ***
PL7	IN.T.A.C. Floor Sealer 05P	9.00	50.00%	0.00%	50.00%	20.00%	80.00%	0.1420	1.222	5.63	4.50	0.781	18.74	3.42	0.00	5.63	100%
	Quick Clean 99	8.50	90.00%	0.00%	90.00%	0.00%	9.00%	0.0010	1.222	7.65	7.65	0.009	0.22	0.04	0.00	85.00	100%
									State Potential Emissions:			0.790	18.96	**3.46**	**0.00**		

METHODOLOGY

* All materials "as supplied".

** Frame paint units are frames; other units are "floors" manufactured, one floor per single wide home or 1/2 of double wide home; a finished "floor" includes all home components

*** Used 100% transfer efficiency for sealant. Used AP-42 transfer efficiency for airless application for spray-applied paints.

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Appendix A: Emissions Calculations
Woodworking: PM-10 and Particulate

Company Name:	Patriot Homes, Inc.
Address City IN Zip:	57420 CR 3 S., Elkhart, IN 46517
Permit No./Plt ID:	T141-7535-00105
Reviewer:	V. Cordell
Date:	August 11, 1998

Pursuant to 326 IAC 6-3 (Process Operations), the allowable pounds per hour PM emission rate for each of the woodworking facilities is calculated with the following equation:

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

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

From permit application:

PLANT 1, with dust collector DC-1:

lumber to be cut: 5373.9584 lbs/hr
particulate matter to dust collector: 13.9947 lbs/hr — Maximum potential emissions before control: 36.02 tons/yr PM
PM emitted from DC-1: 0.0382 lbs/hr* — with control: **2.313 tons/yr PM**
PM-10 emitted from DC-1: 0.4898 lbs/hr — **2.145 tons/yr PM-10**
Actual hours of operation: 2205 hours/year

326 IAC 6-3-2 allowable for Plant 1 woodworking, using above equation: 7.95 lbs PM/hr
Maximum annual allowable emissions: 34.82 tons PM/yr

PLANT 2, with dust collector DC-2:

lumber to be cut: 4937.3243 lbs/hr
particulate matter to dust collector: 12.8576 lbs/hr — Maximum potential emissions before control: 56.32 tons/yr PM
PM emitted from DC-2: 0.0351 lbs/hr* — with control: **2.125 tons/yr PM**
PM-10 emitted from DC-2: 0.4500 lbs/hr — **1.971 tons/yr PM-10**
Actual hours of operation: 2400 hours/year

326 IAC 6-3-2 allowable for Plant 2 woodworking, using above equation: 7.51 lbs PM/hr
Maximum annual allowable emissions: 32.89 tons PM/yr

- continued -

Appendix A: Emissions Calculations
Woodworking: PM-10 and Particulate

Company Name: Patriot Homes, Inc.
Permit No./Plt ID: T141-7535-00105

PLANT 6 mill shop, with cyclone C-1:

lumber to be cut: 3163.2656 lbs/hr
particulate matter to cyclone: 8.2245 lbs/hr — Maximum potential emissions before control: 36.02 tons/yr PM
PM emitted from C-1: 0.2994 lbs/hr* — with control: **2.572 tons/yr PM**
PM-10 emitted from C-1: 0.2879 lbs/hr — **1.261 tons/yr PM-10**
Actual hours of operation: 3920 hours/year

326 IAC 6-3-2 allowable for Plant 6 woodworking, using above equation: 5.57 lbs PM/hr
Maximum annual allowable emissions: 24.41 tons PM/yr

PLANT 7 mill shop, with cyclone C-3:

lumber to be cut: 865.9415 lbs/hr
particulate matter to cyclone: 2.2551 lbs/hr — Maximum potential emissions before control: 9.88 tons/yr PM
PM emitted from C-1: 0.0821 lbs/hr* — with control: **0.705 tons/yr PM**
PM-10 emitted from C-1: 0.0789 lbs/hr — **0.346 tons/yr PM-10**
Actual hours of operation: 2205 hours/year

326 IAC 6-3-2 allowable for Plant 7 woodworking, using above equation: 2.33 lbs PM/hr
Maximum annual allowable emissions: 10.24 tons PM/yr

METHODOLOGY

*The PM emission rates after control in the application are for the PM that is not also categorized as PM-10. The given PM and PM-10 hourly emissions were added together before deriving the yearly PM emissions after control for each woodworking shop.

Potential emissions (lbs/hr) x 8760 hrs/yr x 1 ton/2000 lbs = Maximum potential emissions (tons/yr)

Appendix A: Emissions Calculations
Welding and Thermal Cutting

Company Name: Patriot Homes, Inc.
Address City IN Zip: 57420 CR 3 S., Elkhart, IN 46517
Permit/Plt ID #: T039-7535-00105
Reviewer: V. Cordell
Date: July 2, 1998

PROCESS	Number of Stations	Max. electrode consumption for all stations(lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
WELDING				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Submerged Arc	0			0.036	0.011			0.000	0.000	0.000	0	0.000
Metal Inert Gas (MIG)(carbon steel)	0			0.0055	0.0005			0.000	0.000	0.000	0	0.000
Stick (carbon steel electrode)	9	10.1351		0.037	0.003			0.375	0.030	0.000	0	0.030
Tungsten Inert Gas (TIG)(carbon steel)	0			0.0055	0.0005			0.000	0.000	0.000	0	0.000
Oxyacetylene(carbon steel)	0			0.0055	0.0005			0.000	0.000	0.000	0	0.000
	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				
FLAME CUTTING				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	0			0.1622	0.0005	0.0001	0.0003	0.000	0.000	0.000	0.000	0.000
Oxymethane	0			0.0815	0.0002		0.0002	0.000	0.000	0.000	0.000	0.000
Plasma**	0			0.0039				0.000	0.000	0.000	0.000	0.000

EMISSION TOTALS

Potential Emissions lbs/hr								0.375				0.030
Potential Emissions lbs/day								9.000				0.730
Potential Emissions tons/year								1.64				0.13

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.
Welding emissions, lb/hr: (max. lbs of electrode used/hr)(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.