INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: November 9, 2006

RE: Crystal Valley Homes / 039-16749-00468

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 03/23/06

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MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY

Crystal Valley Homes
10440 County Road 2
Middlebury, Indiana 46540

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

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

Operation Permit No.: MSOP 039-16749-00468	
Original signed by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: November 9, 2006 Expiration Date: November 9, 2011

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary manufactured housing plant.

Authorized Individual:	President
Source Address:	10440 County Road 2, Middlebury, Indiana 46540
Mailing Address:	10440 County Road 2, Middlebury, Indiana 46540
General Source Phone Number:	(574) 825-4334
SIC Code:	2451
County Location:	Elkhart
Source Location Status:	Nonattainment for 8-hour Ozone and Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not in 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) surface coating facility with a maximum throughput rate of sixteen (16) floors per day, using a putty knife for material application and two (2) air assisted airless spray guns (identified as SG-1 and SG-2). This facility was constructed in 1999.

(b) A woodworking facility with a maximum throughput rate of 8,230 pounds of lumber per hour, with particulate emissions controlled by a baghouse and emissions exhausting at stack A. This facility was constructed in 1999.

(c) Ten (10) natural gas-fired combustion units (office heaters, air make-up unit, and thermo-cyclers), with a maximum combined heat input capacity of 7.04 MMBtu per hour. These units were installed in 1999.

SECTION B GENERAL CONDITIONS

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

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

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5] [IC13-15-3-6(a)]

(a) This permit, 039-16749-00468, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

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

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability

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

B.5 Severability

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

B.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

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

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

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

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) 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; and

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

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

(b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1(1).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

(a) All terms and conditions of permits established prior to and issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

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

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least 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.13 Permit Renewal [326 IAC 2-6.1-7]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

(1) Submitted at least ninety (90) days prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

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

B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6-1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6-1-6 whenever the Permittee seeks to amend or modify this permit.

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

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

B.15 Source Modification Requirement

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

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

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

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

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

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

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

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

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

C.5 Fugitive Dust Emissions [326 IAC 6-4]

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

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

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

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an “authorized individual” as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

C.8 Performance Testing [326 IAC 3-6]

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

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

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

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

Compliance Monitoring Requirements

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

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

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

C.12 Instrument Specifications [326 IAC 2-1.1-11]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.13 Response to Excursions or Exceedances

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records;

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected emissions unit while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that re-testing in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the re-testing deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to non-compliant stack tests.

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

Record Keeping and Reporting Requirements

C.15 Malfunctions Report [326 IAC 1-6-2]

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

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are

available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-5] [IC 13-14-1-13]

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

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

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description:

(a) One (1) surface coating facility with a maximum throughput rate of sixteen (16) floors per day, using a putty knife for material application and two (2) air assisted airless spray guns (identified as SG-1 and SG-2). This facility was constructed in 1999.

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

Emission Limitations and Standards

D.1.1 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d):

(a) Particulate from the surface coating facility shall be controlled by a dry particulate filter, water-wash, or an equivalent control device, and the Permittee shall operate the control device shall be operated in accordance with the manufacturer's specifications.

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

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

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

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

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to CP039-8958-00468, issued on February 13, 1998 and 326 IAC 8-1-6, (New Facilities; General Reduction Requirements) the surface coating facility is subject to the requirements of 326 IAC, 8-1-6, which requires that the Best Available Control Technology (BACT) be used to control VOC emissions. Pursuant to this rule,

(a) The air assisted airless spray applicator shall be used at all times the unit is operated.

(b) The spray applicator shall be cleaned with compliant cleaners

(c) All operators shall be trained on proper application, cleanup, and equipment use.

(d) All storage containers used for HAP containing materials shall be kept covered when not in use.

Compliance with these limits have been determined to satisfy the requirements of BACT.

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

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

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

D.1.4 Record Keeping Requirements

(a) To document compliance with Condition D.1.1 the Permittee shall maintain a record of any actions taken if overspray is visibly detected.

(b) To document compliance with Condition D.1.2(c), the Permittee shall maintain the following training records:

(1) A copy of the current training program;

(2) A list of the current personnel, by name, that are required to be trained and the date they were trained and the date of the most recent refresher training.

Records of prior training programs and former personnel are not required to be maintained.

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

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description:

(b) A woodworking facility with a maximum throughput rate of 8,230 pounds of lumber per hour, with particulate emissions controlled by a baghouse and emissions exhausting at stack A. This facility was constructed in 1999.

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

Emission Limitations and Standards

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the PM emission rate from the woodworking facility shall not exceed 10.5 pounds per hour rate when operating at a process weight rate of 8,230 pounds per hour.

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

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

$$E = 4.10\ P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

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

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

Compliance Determination Requirements

D.2.3 Particulate Control

In order to comply with condition D.2.1 the baghouse for particulate control shall be in operation and control emissions from the woodworking facility at all times that the woodworking facility is in operation.

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

D.2.4 Visible Emissions Notations

(a) Daily visible emission notations of the woodworking facility 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) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.5 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the woodworking facility 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.2.6 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, failed units and the associated process shall be shut down immediately until the failed unit have been repaired or replaced.

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

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

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

D.2.7 Record Keeping Requirements

(a) To document compliance with Condition D.2.4, the Permittee shall maintain records of daily visible emission notations of the woodworking stack exhaust, when exhausting to the atmosphere.

(b) To document compliance with Conditions D.2.5, the Permittee shall maintain records of the results of the inspections required under Conditions D.2.5 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.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

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

Company Name:	Crystal Valley Homes
Address:	10440 County Road 2
City:	Middlebury, Indiana 46540
Phone #:	(574) 825-4334
MSOP #:	039-16749-00468

I hereby certify that Crystal Valley Homes is
☐ still in operation.
☐ no longer in operation.

I hereby certify that Crystal Valley Homes is
☐ in compliance with the requirements of MSOP 039-16749-00468.
☐ not in compliance with the requirements of MSOP 039-16749-00468.

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

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

Noncompliance:

MALFUNCTION REPORT

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

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

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

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

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

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

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

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

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:

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

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

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

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

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____
*SEE PAGE 2

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

326 IAC 1-6-1 Applicability of rule

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

326 IAC 1-2-39 "Malfunction" definition

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

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

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

_____
_____

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	Crystal Valley Homes
Source Location:	10440 County Road 2, Middlebury, Indiana 46540
County:	Elkhart
SIC Code:	2451
Operation Permit No.:	MSOP 039-16749-00468
Permit Reviewer:	ERG/SD

On September 23, 2006 the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that Crystal Valley Homes had applied for a Minor Source Operating Permit to operate a stationary manufactured housing plant. The notice also stated that IDEM, OAQ 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.

Upon further review, IDEM, OAQ has decided to make the following revisions to the draft permit. New language is in **bold** and language shown in ~~strikeout~~ has been deleted.

1. IDEM, OAQ has revised Condition B.13 – Permit Renewal to indicate that a timely renewal application for a MSOP is one that is submitted at least ninety (90) days prior to the date of expiration of the permit. The following changes have been made to the permit:

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

…

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

(1) Submitted at least ~~nine (9) months~~ **ninety (90) days** prior to the date of the expiration of this permit; and

…

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	Crystal Valley Homes
Source Location:	10440 County Road 2, Middlebury, Indiana 46540
County:	Elkhart
SIC Code:	2451
Operation Permit No.:	M039-16749-00468
Permit Reviewer:	ERG/SD

The Office of Air Quality (OAQ) has reviewed an application from Crystal Valley Homes relating to the operation of a stationary manufactured housing plant.

Permitted Emission Units and Pollution Control Equipment

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

(a) One (1) surface coating facility with a maximum throughput rate of sixteen (16) floors per day, using a putty knife for material application and two (2) air assisted airless spray guns (identified as SG-1 and SG-2). This facility was constructed in 1999.

(b) A woodworking facility with a maximum throughput rate of 8,230 pounds of lumber per hour, with particulate emissions controlled by a baghouse and emissions exhausting at stack A. This facility was constructed in 1999.*

(c) Ten (10) natural gas-fired combustion units (office heaters, air make-up unit, and thermo-cyclers), with a maximum combined heat input capacity of 7.04 MMBtu per hour. These units were installed in 1999.

*Note: The maximum throughput of lumber has decreased from 24,690 pounds per hour to 8,230 pounds per hour due to limitations in the drywall/finishing processes. Crystal Valley builds manufactured homes. Each home consists of either one or two floors, one floor being a single wide home and two floors being each half of a double wide home. There are multiple stages that each floor must go through in the production process. Each floor is processed in an assembly line process. Due to the size of the facility there are a total of ten (10) drywall drying stations in the production line. One (1) drywall drying station processes one (1) floor where each floor must sit overnight after the drywall is applied to allow sufficient time for the drywall to dry. If the floor is moved before the drywall has dried completely, the drywall will crack. The lengthy drying process has reduced the amount of material that goes through the woodworking facility because the number of floors that can be produced has been reduced.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Existing Approvals

The source has been operating under CP039-8958-00468, issued on February 13, 1998.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

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

An application for the purposes of this review was received on November 8, 2002, with additional information received on January 13, 2003 and February 12, 2003.

Emission Calculations

See Appendix A of this document for detailed emission calculations (Appendix A, pages 1 through 7).

Potential to Emit of the Source Before Controls

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

Pollutant	Potential to Emit (tons/year)
PM	75.4
PM10	75.6
SO_2	0.02
VOC	10.2
CO	2.54
NO_x	3.02

HAPs	Potential to Emit (tons/year)
Highest Single HAP (MEK)	1.82 (<10)
Combination of HAPs	4.89 (<25)

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM and PM10 are greater than 25 tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of each criteria pollutant is less than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. A MSOP will be issued.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a combination of HAPs is less than twenty-five (25) tons per year.

(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.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM10	Attainment
PM2.5	Attainment
SO_2	Attainment
NO_2	Attainment
8-hour Ozone	Nonattainment
CO	Attainment
Lead	Attainment

(a) Elkhart County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability – Entire Source section.

(b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) emissions are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for emission offset, 326 IAC 2-3.

(c) Elkhart County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(d) On August 7, 2006, a temporary emergency rule took effect redesignating Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard, redesignating Lake County to attainment for the sulfur dioxide standard, and revoking the one-hour ozone standard in Indiana. The Indiana Air Pollution Control Board has approved a permanent rule revision to incorporate these changes into 326 IAC 1-4-1. The permanent revision to 326 IAC 1-4-1 will take effect prior to the expiration of the emergency rule.

Source Status

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

Pollutant	Emissions (tons/year)
PM	75.4
PM10	75.6
SO_2	0.02
VOC	10.2
CO	2.54
NO_x	3.02
Single HAP	<10
Combination HAPs	<25

(a) This existing source is not a major stationary source because no regulated pollutant (under PSD) is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.

(b) This existing source is not a major stationary source because no regulated pollutant

(under Emission Offset) is emitted at a rate of 100 tons per year or greater.

(c) These emissions were based on the potential to emit calculations for the source (see appendix A).

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

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

(a) each criteria pollutant is less than 100 tons per year,

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

This status is based on the revised potential to emit calculations for the source (see Appendix A).

Federal Rule Applicability

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

(b) The requirements of 40 CFR 63, Subpart JJ - National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Wood Furniture Manufacturing Operations, (326 IAC 14) are not included in the permit for this source because it is not a major source of HAPs as defined in 40 CFR 63, Subpart A.

State Rule Applicability – Entire Source

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

Crystal Valley Homes was constructed in 1999 and is an existing minor source. It is not in one (1) of the twenty-eight (28) listed source categories. There have been no modifications since the source was built. The potential to emit of each criteria pollutant from the entire source is less than 250 tons per year. Therefore, the provisions of 326 IAC 2-2 do not apply.

326 IAC 2-3 (Emission Offset)

On April 15, 2004, the U.S. EPA designated Elkhart County as non-attainment for ozone under the 8-hour standard. No modifications have been made at this source since June 15, 2004, when this designation became effective. Furthermore, the potential to emit of VOC for this source is equal to 10.2 tons per year. Therefore, this source is a minor source under 326 IAC 2-3 (Emission Offset).

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

The operation of this manufactured housing plant emits less than ten (10) tons per year of a single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, the provisions of 326 IAC 2-4.1 do not apply.

326 IAC 2-6 (Emission Reporting)

This source is not subject to the provisions of 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit under 326 IAC 2-7, Part 70 Program, it is not located in Lake or Porter County, and it does not emit lead (Pb) to the ambient air at levels equal to or greater than five (5) tons per year.

326 IAC 5-1 (Opacity Limitations)

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

State Rule Applicability - Surface Coating

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

The Permittee was subject to the provisions of 326 IAC 8-1-6 in their construction permit CP039-8958-00468, issued on February 13, 1998 because the potential VOC emissions from the surface coating facility were greater than twenty-five (25) tons per year. The source has changed the material usage and the method of application, utilizing two (2) air assisted airless spray guns and the revised potential VOC emissions, as shown in Appendix A, are below twenty-five (25) tons per year. However, the source is still subject to the provisions of 326 IAC 8-1-6 pursuant to 326 IAC 8-1-1(a). Therefore, pursuant to CP-039-8958-00408, issued on February 13, 1998, and the provisions of 326 IAC 8-1-6, the following conditions shall apply as BACT:

(a) The air assisted airless spray applicator shall be used at all times that the unit is operated.

(b) The spray applicator shall be cleaned with compliant cleaners

(c) All operators shall be trained on proper application, cleanup, and equipment use.

(d) All storage containers used for HAP containing materials shall be kept covered when not in use.

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

The surface coating facility is subject to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) because this facility uses more than five (5) gallons of coating per day.

Pursuant to 326 IAC 6-3-2(d), the surface coating facility shall comply with the following requirements:

(a) Particulate from the surface coating facility shall be controlled by a dry particulate filter, water-wash or an equivalent control device, and the control device shall be operated in accordance with the manufacturer's specifications.

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

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

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

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

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

The provisions of 326 IAC 8-2-12 do not apply to this source because the surface coating facility is not used for surface coating of wood furnishings. It surface coats floors used for manufactured housing.

State Rule Applicability - Woodworking

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

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the PM emission rate from the woodworking facility shall not exceed 10.5 pounds per hour when operating at a process weight rate of 8,230 pounds per hour.

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

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

$E = 4.10\ P^{0.67}$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

The baghouse shall be in operation at all times the woodworking facility is in operation, in order to comply with this rule.

State Rule Applicability - Ten (10) Natural-Gas Fired Combustion Units

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

The natural gas-fired heating combustion units at the source are not subject to the provisions of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) because according to 326 IAC 6-3-1(b)(14) manufacturing processes with potential emissions less than five hundred fifty-one thousandths (0.551) pounds per hour are exempt from the provisions of this rule.

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

The natural gas-fired heating combustion units at the source are not subject to the provisions of 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) because these units are not indirect heating units.

Compliance Monitoring Requirements

The compliance monitoring requirements applicable to the woodworking facility at the source are as follows:

Visible Emissions Notations

(a) Daily visible emission notations of the woodworking facility 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) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Baghouse Inspections

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

Broken or Failed Bag Detection

(g) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced.

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

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

Conclusion

The operation of this manufactured housing plant shall be subject to the conditions of the Minor Source Operating Permit No. 039-16749-00468.

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR <100
Ten (10) Combustion Units

Company Name: Crystal Valley Homes
Address: 10440 County Road 2, Middlebury, IN 46540
MSOP: 039-16749
Plt ID: 039-00468
Reviewer: ERG/SD
Date: August 25, 2006

Heat Input Capacity (MMBtu/hour)	Potential Throughput (MMSCF/year)
7.04	60.5

Pollutant

	PM*	PM10*	SO_2	** NOx	VOC	CO
Emission Factor (lb/MMSCF)	1.9	7.6	0.6	100	5.5	84.0
Potential To Emit (tons/year)	0.06	0.23	0.018	3.02	0.17	2.54

* PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM and PM10 combined.
**Emission factor for NOx (Uncontrolled) = 100 lb/MMSCF.
Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, and 1.4-2, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July, 1998).

All Emission factors are based on normal firing.

METHODOLOGY
Potential throughput (MMSCF/year) = Heat input capacity (MMBtu/hour) * 8760 hours/year * 1 MMSCF/1020 MMBtu
PTE (tons/year) = Potential throughput (MMSCF/year) * Emission factor (lb/MMSCF) * 1 ton/2000 lbs

See next page for HAPs emissions calculations.

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR<100
Ten (10) Combustion Units

Company Name: Crystal Valley Homes
Address: 10440 County Road 2, Middlebury, IN 46540
MSOP: 039-16749
Plt ID: 039-00468
Reviewer: ERG/SD
Date: August 25, 2006

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor (lb/MMSCF)	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential To Emit (tons/year)	6.348E-05	3.628E-05	2.267E-03	5.442E-02	1.028E-04

HAPs - Metals

	Lead	Cadmuim	Chromium	Manganese	Nickel
Emission Factor (lb/MMSCF)	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential To Emit (tons/year)	1.512E-05	3.325E-05	4.232E-05	1.149E-05	6.348E-05

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors provided above are from AP-42, Chapter 1.4, Table 1.4-3 and 1.4-4 (July, 1998).
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
WoodWorking

Company Name: Crystal Valley Homes
Address: 10440 County Road 2, Middlebury, IN 46540
MSOP: 039-16749
Plt ID: 039-00468
Reviewer: ERG/SD
Date: August 25, 2006

POTENTIAL TO EMIT IN TONS PER YEAR BASED ON THE AMOUNT OF DUST COLLECTED
Control = Baghouse with 99 % efficiency

Pollutant	*Dust Collected (lbs/floor)	Max. Production Rate (floors/day)	Hours of Operation (hours/day)	PTE of PM/PM10 (lbs/hour)	PTE of PM/PM10 (tons/year)
PM/PM10	20.2	16	24	13.60	59.6

Assume all the dust collected are PM and PM10 emissions
* Source generates 20.2 pounds of dust per floor and operates 24 hours per day.

METHODOLOGY
PTE PM/PM10 (lbs/hour) = Dust Collected (lbs/floor) * Max. Production Rate (floors/day) * 1 day/24 hours * 1/Control Efficiency (%)
PTE PM/PM10 (tons/year) = Dust Collected (lbs/floor) * Max. Production Rate (floors/day) * 1 day/24 hours * 1 ton/2000 lbs * 8760 hours/year

Appendix A: Emissions Calculations
Surface Coating

Company Name: Crystal Valley Homes
Address: 10440 County Road 2, Middlebury, IN 46540
MSOP: 039-16749
Plt ID: 039-00468
Reviewer: ERG/SD
Date: August 25, 2006

Material	Density (lb/gal)	VOC Content (%)	Material Usage (gal/unit)	Max.Throughput (unit/hour)	Pounds VOC per gallon of coating	PTE of VOC (lbs/hour)	PTE VOC (tons/year)	PTE PM/PM10 (ton/year)	*Transfer Efficiency
AHB Clear Thin Spread Adh	8.90	0.05%	0.089	0.667	0.0042	0.00025	0.001	0.00	100%
Boss 310 RTV Sil Adh	8.66	3.11%	0.006	0.667	0.27	0.00108	0.005	0.00	100%
Boss 363 Sil Acr Ltx Caulk	13.7	2.37%	0.295	0.667	0.33	0.06401	0.280	0.00	100%
Chem Caulk 900 Stone	10.0	9.50%	0.002	0.667	0.95	0.00127	0.006	0.00	100%
Crazy Clean	8.17	7.90%	0.080	0.667	0.65	0.03442	0.151	0.00	100%
Cyclo Brakes & Parts Cleaner	6.34	74.0%	0.030	0.667	4.69	0.09383	0.411	0.00	100%
Cyclo C-33 Silicone Spray	5.25	92.0%	0.038	0.667	4.83	0.12236	0.536	0.00	100%
Cyclo C-900 Spray Adh	5.60	72.0%	0.004	0.667	4.03	0.01075	0.047	0.00	100%
DPM Glycol Ether	7.91	100%	0.024	0.667	7.91	0.12656	0.554	0.00	100%
Dulux 2200 Pro Acr Ltx Paint	11.3	7.38%	0.026	0.667	0.83	0.01447	0.063	0.00	100%
EC-510 Citrus Cleaner	7.16	85.0%	0.016	0.667	6.09	0.06492	0.284	0.00	100%
Ener 10 Cleaner	7.99	95.8%	0.035	0.667	7.65	0.17860	0.782	0.00	100%
Ener 42 Adhesive	10.0	0.00%	0.198	0.667	0.00	0.00000	0.000	0.00	100%
Floor Sealer DP-121	8.67	1.20%	0.149	0.667	0.10	0.01033	0.045	0.00	100%
Foamnail One Part Adh	9.25	0.00%	1.026	0.667	0.00	0.00000	0.000	0.00	100%
Foamnail Part A	10.3	0.00%	1.974	0.667	0.00	0.00000	0.000	0.00	100%
Foamnail Part B	8.84	0.00%	1.789	0.667	0.00	0.00000	0.000	0.00	100%
Geocel 8125	8.38	3.50%	0.043	0.667	0.29	0.00841	0.037	0.00	100%
Geocel Stainmatch	13.5	1.49%	0.061	0.667	0.20	0.00819	0.036	0.00	100%
Glass Cleaner	7.99	11.4%	0.001	0.667	0.91	0.00061	0.003	0.00	100%
Grundy Shingle Tite	9.85	16.0%	0.113	0.667	1.58	0.11902	0.521	0.00	100%
Harvey Seal	11.3	8.82%	0.006	0.667	1.00	0.00400	0.018	0.00	100%
Henry Grundy Wet Patch	8.86	18.8%	0.008	0.667	1.67	0.00890	0.039	0.00	100%
In Tac GP17	9.40	0.00%	0.656	0.667	0.00	0.00000	0.000	0.00	100%
Lemon Shine Up	7.30	24.8%	0.005	0.667	1.81	0.00603	0.026	0.00	100%
Neoprene T283 Contact Adh	6.60	80.4%	0.020	0.667	5.31	0.07075	0.310	0.00	100%
Oatey All Weather Cement	7.84	70.0%	0.001	0.667	5.49	0.00366	0.016	0.00	100%
Oatey Flowguard Gold	7.76	52.7%	0.038	0.667	4.09	0.10359	0.454	0.00	100%
Oatey Reg Abs Cement	7.31	64.9%	0.092	0.667	4.74	0.29075	1.273	0.00	100%
Quad Advanced Form Sealent	9.85	40.0%	0.027	0.667	3.94	0.07092	0.311	0.00	100%
SA-167 Sil Arc Ltx Caulk	13.0	30.0%	0.035	0.667	3.90	0.09090	0.398	0.00	100%
SheetRock Topping JT Comp	14.2	0.06%	21.645	0.667	0.01	0.12312	0.539	0.00	100%
Speedwall Flat Int Ltx Paint	10.9	0.49%	6.829	0.667	0.05	0.24156	1.058	0.00	100%
*Vapor Barrier DP112	10.2	1.00%	4.692	0.667	0.10	0.31999	1.402	15.8	75%
WD-40	6.25	74.0%	0.020	0.667	4.63	0.06167	0.270	0.00	100%
WoodMaster Int Stain	7.29	69.8%	0.010	0.667	5.09	0.03392	0.149	0.00	100%
					TOTAL =	**2.29**	**10.0**	**15.8**	

* All material is applied using a putty knife, which results in 100 % transfer efficiency except for Vapor Barried DP 112, which is applied using the air assisted airless spray gun.
Weight % solids in Vapor Barrier DP 112 is equal to 45 %

METHODOLOGY
Pounds of VOC per Gallon Coating = Density (lb/gal) * VOC Content (%)
PTE of VOC (lbs/hour) = Pounds of VOC per Gallon Coating (lb/gal) * Material Usage (gal/unit) * Max. Throughput (unit/hour)
PTE of VOC (tons/year) = Pounds of VOC per Gallon Coating (lb/gal) * Material Usage (gal/unit) * Max.Throughput (unit/hour) * 8760 hours/year * 1 ton/2000 lbs
PTE of PM/PM10 (tons/year) = Max. Throughput (unit/hour) * Material Usage (gal/unit) * Density (lbs/gal) * Weight % Solids * (1-Transfer Efficiency %) * 8760 hours/year * 1 ton/2000 lbs

Appendix A: Emissions Calculations
HAP Emissions from Surface Coating

Company Name: Crystal Valley Homes
Address: 10440 County Road 2, Middlebury, IN 46540
MSOP: 039-16749
Plt ID: 039-00468
Reviewer: ERG/SD
Date: August 25, 2006

Material Usage And Weight Percent Information

Material	Density (lb/gal)	Material Usage (gal/unit)	Max. Throughput (unit/hour)	Ethylene Gylcol	Glycol Ether	2 Butoxy Ethanol	Xylene	Hexane	Toluene	Butane	Ethylbenzene
AHB Clear Thin Spread Adh	8.90	0.089	0.667								
Boss 310 RTV Sil Adh	8.66	0.006	0.667								
Boss 363 Sil Acr Ltx Caulk	13.7	0.295	0.667	1.0%							
Chem Caulk 900 Stone	10.0	0.002	0.667				7.0%				1.5%
Crazy Clean	8.17	0.080	0.667			4.85%					
Cyclo Brakes & Parts Cleaner	6.34	0.030	0.667						30%		
Cyclo C-33 Silicone Spray	5.25	0.038	0.667					40%			
Cyclo C-900 Spray Adh	5.60	0.004	0.667					35%		35%	
DPM Glycol Ether	7.91	0.024	0.667		99%						
Dulux 2200 Pro Acr Ltx Paint	11.3	0.026	0.667	5.0%	5.0%						
EC-510 Citrus Cleaner	7.16	0.016	0.667								
Ener 10 Foam Cleaner	7.99	0.035	0.667								
Ener 42 Adhesive	10.0	0.198	0.667								
Floor Sealer DP-121	8.67	0.149	0.667								
Foamnail One Part Adh	9.25	1.026	0.667								
Foamnail Part A	10.3	1.974	0.667								
Foamnail Part B	8.84	1.789	0.667								

Potential To Emit (Tons Per Year)

Material	Density (lb/gal)	Material Usage (gal/unit)	Max. Throughput (unit/hour)	Ethylene Gylcol	Glycol Ether	2 Butoxy Ethanol	Xylene	Hexane	Toluene	Butane	Ethylbenzene
AHB Clear Thin Spread Adh	See Above for Information			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boss 310 RTV Sil Adh				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boss 363 Sil Acr Ltx Caulk				0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chem Caulk 900 Stone				0.00	0.00	0.00	4.09E-03	0.00	0.00	0.00	8.77E-04
Crazy Clean				0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Cyclo Brakes & Parts Cleaner				0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
Cyclo C-33 Silicone Spray				0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00
Cyclo C-900 Spray Adh				0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.00
DPM Glycol Ether				0.00	0.55	0.00	0.00	0.00	0.00	0.00	0.00
Dulux 2200 Pro Acr Ltx Paint				0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00
EC-510 Citrus Cleaner				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ener 10 Foam Cleaner				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ener 42 Adhesive				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Floor Sealer DP-121				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Foamnail One Part Adh				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Foamnail Part A				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Foamnail Part B				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			TOTAL =	**0.16**	**0.59**	**0.09**	**4.09E-03**	**0.26**	**0.17**	**0.02**	**8.77E-04**

IPDI = Isophorone Diisocyante
MDI = Diphenylmethane Diisocynate
MEK = Methyl Ethyl Ketone
NOTE: Foamnail Part A, Foamnail One Part and Ener 42 contain MDI, majority of which reacts instaneously upon application. The potential to emit MDI was estimated by the source using the MDI Emission Estimator software developed by the Alliance for the Polyurethane Industry and is equal to 1.42E-06 tons per year (www.polyurethane.org).

METHODOLOGY
PTE of HAPS (tons/year) = Density (lb/gal) * Material Usage (gal/unit) * Max. Throughput (unit/hour) * Weight % HAP * 8760 hours/year * 1 ton/2000 lbs

Appendix A: Emissions Calculations
HAP Emissions from Surface Coating

Company Name: Crystal Valley Homes
Address: 10440 County Road 2, Middlebury, IN 46540
MSOP: 039-16749
Plt ID: 039-00468
Reviewer: ERG/SD
Date: August 25, 2006

Material Usage And Weight Percent Information

Material	Density (lb/gal)	Material Usage (gal/unit)	Max. Throughput (unit/hour)	Glycol Ether Weight %	2 Butoxy Ethanol Weight %	Xylene Weight %	Hexane Weight %	Toluene Weight %	Butane Weight %	Ethylbenzene Weight %	Ethylalcohol Weight %	Methanol Weight %	MEK Weight %	Tetrahydrofuran Weight %	Acetaldehyde Weight %	Benzene Weight %
Geocel 8125	8.38	0.043	0.667													
Geocel Stainmatch	13.5	0.061	0.667													
Glass Cleaner	7.99	0.001	0.667		10.0%						20%	1.0%				
Grundy Shingle Tite	9.85	0.113	0.667													
Harvey Seal	11.3	0.006	0.667													
Henry Grundy Wet Patch	8.86	0.008	0.667													
In Tac GP17	9.40	0.656	0.667													
Lemon Shine Up	7.30	0.005	0.667						5.0%							
Neoprene T283 Contact Adh	6.60	0.020	0.667				50%	20%								
Oatey All Weather Cement	7.84	0.001	0.667				20%						5.0%			
Oatey Flowguard Gold	7.76	0.038	0.667										40%	40%		
Oatey Reg Abs Cement	7.31	0.092	0.667										75%			
Quad Advanced Form Sealent	9.85	0.027	0.667			15%				5.0%						
SA-167 Sil Arc Ltx Caulk	13.0	0.035	0.667	2.0%												
SheetRock Topping JT Comp	14.2	21.645	0.667												0.10%	
Speedwall Flat Int Ltx Paint	10.9	6.829	0.667													
Vapor Barrier DP112	10.2	4.692	0.667													
WD-40	6.25	0.020	0.667													
WoodMaster Int Stain	7.29	0.010	0.667													5.0%

Potential To Emit (Tons Per Year)

Material	Density (lb/gal)	Material Usage (gal/unit)	Max. Throughput (unit/hour)	Glycol Ether	2 Butoxy Ethanol	Xylene	Hexane	Toluene	Butane	Ethylbenzene	Ethylalcohol	Methanol	MEK	Tetrahydrofuran	Acetaldehyde	Benzene
Geocel 8125	See Above for Information			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geocel Stainmatch				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Glass Cleaner				0.00	2.33E-03	0.00	0.00	0.00	0.00	0.00	4.67E-03	2.33E-04	0.00	0.00	0.00	0.00
Grundy Shingle Tite				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Harvey Seal				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Henry Grundy Wet Patch				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
In Tac GP17				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lemon Shine Up				0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Neoprene T283 Contact Adh				0.00	0.00	0.00	0.19	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oatey All Weather Cement				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oatey Flowguard Gold				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.34	0.00	0.00
Oatey Reg Abs Cement				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.47	0.00	0.00	0.00
Quad Advanced Form Sealent				0.00	0.00	0.12	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
SA-167 Sil Arc Ltx Caulk				0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SheetRock Topping JT Comp				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00
Speedwall Flat Int Ltx Paint				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vapor Barrier DP112				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WD-40				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WoodMaster Int Stain				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
			TOTAL =	**0.03**	**2.33E-03**	**0.12**	**0.20**	**0.08**	**0.01**	**0.04**	**4.67E-03**	**2.33E-04**	**1.82**	**0.34**	**0.90**	**0.01**

IPDI = Isophorone Diisocyante
MDI = Diphenylmethane Diisocynate
MEK = Methyl Ethyl Ketone

METHODOLOGY
PTE of HAPS (tons/year) = Density (lb/gal) * Material Usage (gal/unit) * Max. Throughput (unit/hour) * Weight % HAP * 8760 hours/year * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Summary

Company Name: Crystal Valley Homes
Address: 10440 County Road 2, Middlebury, IN 46540
MSOP: 039-16749
Plt ID: 039-00468
Reviewer: ERG/SD
Date: August 25, 2006

POTENTIAL TO EMIT BEFORE CONTROLS

Process/Emission Units	PM	PM10	SO_2	NOx	VOC	CO
NG Fired Office Furnaces	0.06	0.23	0.02	3.02	0.17	2.54
Wood Working	59.6	59.6				
Surface Coating	15.8	15.8			10.0	
	75.4	**75.6**	**0.02**	**3.02**	**10.2**	**2.54**

Total PTE of HAPs at the source = **4.89**