



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: January 03, 2006  
RE: Quality Wood Products / 039-20228-00571  
FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

### Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures  
FNPER.dot 1/10/05



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Indianapolis, Indiana 46204-2251  
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**NEW SOURCE CONSTRUCTION AND  
MINOR SOURCE OPERATING PERMIT  
OFFICE OF AIR QUALITY**

**Quality Wood Products  
2933 Thorne Drive  
Elkhart, Indiana 46514**

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

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

Operation Permit No.: MSOP 039-20228-00571	
Issued by:  Paul Dubenetzky, Assistant Commissioner Office of Air Quality	Issuance Date: January 03, 2006  Expiration Date: January 03, 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)]

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The Permittee owns and operates a stationary wood furniture and cabinet manufacturing plant.

Authorized Individual: President  
Source Address: 2933 Thorne Drive, Elkhart, Indiana 46514  
Mailing Address: 2933 Thorne Drive, Elkhart, Indiana 46514  
General Source Phone: (574) 264-5170  
SIC Code: 2434  
County Location: Elkhart  
Source Location Status: Nonattainment area for ozone under the 8-hour standard  
Attainment area for all other criteria pollutants and for ozone under the 1-hour standard  
Source Status: Minor Source Operating Permit  
Minor Source, under PSD and Emission Offset  
Minor Source, Section 112 of the Clean Air Act  
Not in 1 of 28 Source Categories

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

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

- (a) One (1) Binks paint booth for wood coating operations, with a maximum process rate of 40 wood parts per hour and equipped with a high volume low pressure (HVLP) spray gun, controlled by dry filters, and exhausting at stack S1. This unit was constructed in 2001.
- (b) One (1) woodworking and plastics machining process, with a maximum process rate of 305 pounds of wood and plastic per hour, controlled by four (4) portable dust collectors, and exhausting into the building. This unit was constructed in 2001.
- (c) Four (4) natural gas-fired heaters, each with a total maximum heat input rate of 0.16 MMBtu per hour. These units were installed in 2001.

## **SECTION B GENERAL CONDITIONS**

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

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

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

### **B.2 Definitions**

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

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

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

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

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

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

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

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

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

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- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:  
  
Compliance Branch, Office of Air Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue  
Indianapolis, IN 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.7 Preventive Maintenance Plan [326 IAC 1-6-3]**

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days (this time frame is determined on a case by case basis but no more than ninety (90) days) after issuance of this permit, including the following information on each emissions unit:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
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(1).

- (b) A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

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- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.
- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a

notice-only change. [326 IAC 2-6.1-6(d)]

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

**B.9 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2] [IC13-17-3-2][IC 13-30-3-1]**

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

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

**B.10 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]**

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Pursuant to [326 IAC 2-6.1-6(d)(3)]:

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

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

**B.11 Annual Fee Payment [326 IAC 2-1.1-7]**

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- (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.12 Credible Evidence [326 IAC 1-1-6]**

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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 to operate may be revoked for any of the following causes:

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

### C.3 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### C.4 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

### C.5 Performance Testing [326 IAC 3-6]

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- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if

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

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

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

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

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ (and local agency) not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, (and local agency), 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.6 Compliance Requirements [326 IAC 2-1.1-11]**

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

#### **Compliance Monitoring Requirements**

##### **C.7 Compliance Monitoring [326 IAC 2-1.1-11]**

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

##### **C.8 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]**

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

##### **C.9 Response to Excursions or Exceedances**

- 
- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit(s) (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.

### **Record Keeping and Reporting Requirements**

#### **C.10 Malfunctions Report [326 IAC 1-6-2]**

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

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

equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

**C.11 General Record Keeping Requirements [326 IAC 2-6.1-5]**

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- (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.12 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]**

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- (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, any reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

## SECTION D.1

## EMMISSIONS UNITS OPERATION CONDITIONS

### Facility Description:

- (a) One (1) Binks paint booth for wood coating operations, with a maximum process rate of 40 wood parts per hour and equipped with a high volume low pressure (HVLP) spray gun, controlled by dry filters, and exhausting at stack S1. This unit was constructed in 2001.

(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 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12, the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods,

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

#### D.1.2 Particulate [326 IAC 6-3-2(d)]

- (a) Pursuant to 326 IAC 6-3-2(d): Particulate from the Binks paint booth shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with 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 the control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
  - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (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.1.3 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 its control device.

**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**

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- (a) To document compliance with Condition D.1.2 the Permittee shall maintain a record of any actions taken if overspray is visibly detected.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2

## EMISSIONS UNITS OPERATION CONDITIONS

### Facility Description:

- (b) One (1) woodworking and plastics machining process, with a maximum process rate of 305 pounds of wood and plastic per hour, controlled by four (4) portable dust collectors, and exhausting into the building. This unit was constructed in 2001.

(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 particulate emissions from the woodworking and plastic machining process shall not exceed 1.16 pound per hour when operating at a process weight rate of 305 pounds per hour.

The pound 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

### Compliance Determination Requirements

#### D.2.2 Particulate Control

- (a) Except as otherwise provided by statute, rule, or this permit, the four (4) portable dust collectors for particulate control shall be in operation and control emissions from the woodworking and plastic machining process at all times that the woodworking and plastic machining process is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

#### D.2.3 Visible Emissions Notations

- (a) Daily visible emission notations of the woodworking and plastics machining facility 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.2.4 Broken or Failed Bag/Dust Collector Detection

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

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

#### D.2.5 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.3, the Permittee shall maintain records of daily visible emission notations of the woodworking and plastics machining facility stack exhaust when venting to the atmosphere.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### SECTION D.3

### EMISSIONS UNITS OPERATION CONDITIONS

**Facility Description:**

- (c) Four (4) natural gas-fired heaters, each with a total maximum heat input rate of 0.16 MMBtu per hour. These units were installed in 2001.

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

**Emission Limitations and Standards**

There are no applicable State or Federal rules applicable to this unit.

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

**MINOR SOURCE OPERATING PERMIT  
ANNUAL NOTIFICATION**

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

<b>Company Name:</b>	<b>Quality Wood Products</b>
<b>Address:</b>	<b>2933 Thorne Drive</b>
<b>City:</b>	<b>Elkhart, Indiana 46514</b>
<b>Phone #:</b>	<b>(574) 264-5170</b>
<b>MSOP #:</b>	<b>039-20228-00571</b>

I hereby certify that Quality Wood Products is  still in operation.  
 no longer in operation.

I hereby certify that Quality Wood Products is  in compliance with the requirements of MSOP 039-20228-00571.  
 not in compliance with the requirements of MSOP 039-20228-00571.

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

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

<b>Noncompliance:</b>

**MALFUNCTION REPORT**

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

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

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

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

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

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

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

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/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:

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# Indiana Department of Environmental Management Office of Air Quality

## Addendum to the Technical Support Document for a New Source Construction and Minor Source Operating Permit

### Source Background and Description

Source Name: Quality Wood Products  
Source Location: 2933 Thorne Drive, Elkhart, Indiana 46514  
County: Elkhart  
SIC Code: 2434  
Operation Permit No.: 039-20228-00571  
Permit Reviewer: ERG/SD

On November 23, 2005, the Office of Air Quality (OAQ) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that Quality Wood Products had applied for a New Source Construction and Minor Source Operating Permit to operate a stationary wood furniture and cabinet manufacturing plant with control. The notice also stated that 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 permit (language in bold has been added, and language with a line through it has been deleted).

1. The facility is controlled by portable dust collectors that exhaust into the building. The Permittee must conduct the visible emission notations in condition (D.2.3) only in an event the Permittee attaches ducting to the baghouse exhaust and starts venting to the atmosphere. The word "stack" is confusing and not necessary; therefore, condition D.2.3 has been revised as shown

#### D.2.3 Visible Emissions Notations

- (a) Daily visible emission notations of the woodworking and plastics machining 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.

...

2. The rule citation in Condition D.1.1 was revised from 326 IAC 8-2-16 to 326 IAC 8-2-12 as shown. Furthermore, the Table of Contents has been updated to correctly reflect the Section D.1 conditions.

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-~~16~~12]

Pursuant to 326 IAC 8-2-12, . . .

**Emission Limitations and Standards**

- ~~D.1.1 Hazardous Air Pollutants (HAPs) [40 CFR 63, Subpart JJ]~~
- D.1.21** Volatile Organic Compounds (VOC) [326 IAC 8-2-4**12**]
- D.1.32** Particulate [326 IAC 6-3-2(d)]
- D.1.43** Preventive Maintenance Plan [326 IAC 1-6-3]

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

- D.1.54** Record Keeping Requirements

**Appendix A: Emission Calculations  
VOC and PM/PM10 Emissions  
From Paint Booth**

**Company Name:** Quality Wood Products  
**Address:** 2933 Thorne Drive, Elkhart, Indiana 46514  
**Permit:** 039-20028  
**Plt ID:** 039-00571  
**Reviewer:** ERG/SD  
**Date:** October 21, 2004

Coatings	Density (lb/gal)	Weight % Volatile (H <sub>2</sub> O & Organics)	Weight % Water	Weight % Organics	Maximum Throughput (unit/hr)	Maximum Usage (gal/unit)	Pounds VOC per gallon of coating	PTE VOC (lbs/hour)	PTE VOC (lbs/day)	PTE VOC (tons/year)	*PTE PM/PM10 (lb/hour)	*PTE PM/PM10 (ton/year)	Transfer Efficiency
1207 50 Sheen	7.52	73.8%	0.0%	73.8%	40.0	0.083	5.55	18.4	442	80.7	1.64	7.17	75%
Plt 4 Thinner	7.07	100%	0.0%	100%	40.0	0.006	7.07	1.70	40.7	7.43	0.00	0.00	75%
1882 Dynamex	6.82	98.7%	0.0%	98.7%	40.0	0.005	6.73	1.35	32.3	5.89	0.00	0.02	75%
Welbeck Birch	6.65	28.2%	0.0%	28.2%	40.0	0.000	1.88	0.02	0.36	0.07	0.01	0.04	75%
Golden Cherry	6.83	98.2%	0.0%	98.2%	40.0	0.012	4.99	2.40	57.5	10.5	0.02	0.07	75%
White on Oak	6.33	96.4%	0.0%	96.4%	40.0	0.000	6.10	0.02	0.59	0.11	0.00	0.00	75%
Summit Maple	6.88	96.4%	0.0%	96.4%	40.0	0.006	6.63	1.59	38.2	6.97	0.01	0.07	75%
Carigo Stain	6.75	28.1%	0.0%	28.1%	40.0	0.001	1.90	0.08	1.82	0.33	0.05	0.21	75%
Walnut Dye	6.68	28.0%	0.0%	28.0%	40.0	0.003	1.87	0.22	5.39	0.98	0.14	0.63	75%
Ashland 3929	6.62	28.0%	0.0%	28.0%	30.0	0.001	1.85	0.06	1.33	0.24	0.04	0.16	75%
Brazil Cherry	6.79	25.6%	0.0%	25.6%	30.0	0.002	1.74	0.09	2.13	0.39	0.06	0.28	75%
Eagle Walnut hws	6.57	28.0%	0.0%	28.0%	40.0	0.000	1.84	0.01	0.18	0.03	0.00	0.02	75%
<b>** Total (worst case)</b>										<b>80.7</b>	<b>1.64</b>	<b>7.17</b>	

\*Assume all PM emissions are equal to PM10 emissions.

\*\* Only one type of coating can be applied for the booth at one time. Therefore, the worst case scenario is the one which has the highest VOC/PM emissions.

**METHODOLOGY**

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

PTE VOC (lbs/hour) = Pounds of VOC per Gallon coating (lb/gal) \* Max. Throughput (unit/hour) \* Max. Usage (gal/unit)

PTE VOC (lbs/day) = Pounds of VOC per Gallon coating (lb/gal) \* Max. Throughput (unit/hour) \* Max. Usage (gal/unit) \* 24 hours/day

PTE VOC (tons/yr) = Pounds of VOC per Gallon coating (lb/gal) \* Max. Throughput (unit/hour) \* Max. Usage (gal/unit) \* 8760 hours/year \* 1 ton/2000 lbs

PTE PM/PM10 (lbs/hour) = Max. Throughput (unit/hour) \* Max. Usage (gal/unit) \* Density (lbs/gal) \* (1- Weight % Volatile) \* (1-Transfer Efficiency %)

PTE PM/PM10 (tons/year) = Max. Throughput (unit/hour) \* Max. Usage (gal/unit) \* Density (lbs/gal) \* (1- Weight % Volatile) \* (1-Transfer Efficiency %) \* 8760 hours/year \* 1 ton/2000 lbs

**Appendix A: Emissions Calculations  
HAP Emissions  
From Paint Booth**

**Company Name:** Quality Wood Products  
**Address:** 2933 Thorne Drive, Elkhart, Indiana 46514  
**Permit:** 039-20028  
**Plt ID:** 039-00571  
**Reviewer:** ERG/SD  
**Date:** October 21, 2004

**WEIGHT CONTENT IN PERCENT (%) OF HAPS**

Coatings	Density (lb/gal)	Max. Usage Rate (gal/hour)	Weight % Toluene	Weight % MEK	Weight % Xylene	Weight % Methanol	Weight % MIK	Weight % Formaldehyde	Weight % Ethylbenzene	
1207 50 Sheen	Given Below		0.0%	10.00%	5.0%	10.0%				
Plt 4 Thinner			65.0%							
1882 Dynamex			49.0%	8%			7.57%	7.63%		
Welbeck Birch										
Golden Cherry			0.99%	97.0%					0.99%	0.99%
White on Oak										
Summit Maple			0.02%							
Carigo Stain										
Walnut Dye			0.01%						0.99%	0.99%
Ashland 3929										
Brazil Cherry			0.99%							
Eagle Walnut hws										

**POTENTIAL TO EMIT OF HAPS IN TONS PER YEAR**

Coatings	Density (lb/gal)	Max. Usage Rate (gal/hour)	Toluene (ton/year)	MEK (ton/year)	Xylene (tons/year)	Methanol (tons/year)	MIK (tons/year)	Formaldehyde (tons/year)	Ethylbenzene (tons/year)
1207 50 Sheen	7.52	3.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plt 4 Thinner	7.07	0.24	4.83	0.74	0.37	0.74	0.00	0.00	0.00
1882 Dynamex	6.82	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welbeck Birch	6.65	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Golden Cherry	6.83	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
White on Oak	6.33	0.00	0.05	0.01	0.00	0.01	0.01	0.00	0.00
Summit Maple	6.88	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carigo Stain	6.75	0.04	0.00	0.00	0.01	0.00	0.00	0.01	0.01
Walnut Dye	6.68	0.12	0.00	0.00	0.00	3.41	0.00	0.00	0.00
Ashland 3929	6.62	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Brazil Cherry	6.79	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eagle Walnut hws	6.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			<b>4.83</b>	<b>0.74</b>	<b>0.37</b>	<b>3.41</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>

**Worst Case HAP (Toluene) = 4.83**  
**Total HAPs (Worst Case) = 9.39**

MEK = Methyl Ethyl Ketone  
 MIK = Methyl Isobutyl Ketone

**METHODOLOGY**

Potential To Emit HAPs (tons/year) = Density (lb/gal) \* Max. Usage Rate (gal/hour) \* Weight % HAP \* 8760 hours/year \* 1 ton/2000 lbs

**Appendix A: Emission Calculations  
PM/PM10 Emissions  
Woodworking and Plastic Machining Process**

**Company Name:** Quality Wood Products  
**Address:** 2933 Thorne Drive, Elkhart, Indiana 46514  
**Permit:** 039-20028  
**Plt ID:** 039-00571  
**Reviewer:** ERG/SD  
**Date:** October 21, 2004

**1. Woodworking Process Description:**

Maximum Total Throughput (lbs/hour):	305
Total Dust Collected (lbs/hour):	7.62 ( for 4 dust collectors total, based on the test run by the source)
Control Device:	Four (4) portable dust collectors
Control Efficiency (%):	99% (provided by the source)

**2. Potential to Emit PM/PM10 Before Control:**

<b>Hourly PM/PM10 Emissions</b>	= 7.62 lbs/hour * 1/ control efficiency % =	<b>7.70</b>	<b>lbs/hour</b>
<b>Annual PM/PM10 Emissions</b>	= 7.62 lbs/hour x 8760 hour/year x 1 ton/2000 lbs =	<b>33.7</b>	<b>tons/year</b>

Note 1: Assume all the PM emissions are equal to PM10 emissions.

Note 2: There is no grain loading information available for the dust collectors.

**3. Particulate Emission Limit (Process Weight Rule):**

Process Weight Rate, P (lbs/hour) =	305
Equation =	$4.10 \cdot P^{0.67}$
Particulate Limit, E (lbs/hour) =	1.16

Note 3: The four (4) portable dust collectors must be operated at all times when the woodworking and plastic machining operation is in operation in order to comply with the process weight rule pursuant to 326 IAC 6-3-2.

**Appendix A: Emission Calculations  
Natural Gas Combustion  
Four (4) Heaters**

**Company Name:** Quality Wood Products  
**Address:** 2933 Thorne Drive, Elkhart, Indiana 46514  
**Permit:** 039-20028  
**Plt ID:** 039-00571  
**Reviewer:** ERG/SD  
**Date:** October 21, 2004

Heat Input Capacity  
MMBtu/hour

Potential Throughput  
MMCF/year

0.64 (Total of 4 units)

5.61

	<b>Pollutant</b>					
	* PM	* PM10	SO <sub>2</sub>	** NO <sub>x</sub>	VOC	CO
Emission Factor (lb/MMCF)	7.6	7.6	0.6	100	5.5	84.0
Potential To Emit (tons/year)	0.02	0.02	0.00	0.3	0.02	0.2

\*PM and PM10 emission factors are filterable and condensable PM and PM10 combined.

\*\*Emission factors for NO<sub>x</sub> (Uncontrolled) = 100 lb/MMCF

Emission factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, 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.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

**METHODOLOGY**

Potential throughput (MMCF/year) = Heat input capacity (MMBtu/hour) \* 8760 hours/year \* 1 MMCF/1000 MMBtu

PTE (tons/year) = Potential throughput (MMCF/year) \* Emission factor (lb/MMCF) \* 1 ton/2000 lbs

See next page for HAPs emissions calculations.

**Appendix A: Emission Calculations  
Natural Gas Combustion  
Four (4) Heaters**

**Company Name:** Quality Wood Products  
**Address:** 2933 Thorne Drive, Elkhart, Indiana 46514  
**Permit:** 039-20028  
**Plt ID:** 039-00571  
**Reviewer:** ERG/SD  
**Date:** October 21, 2004

**HAPs - Organics**

Emission Factor (lb/MMCF)	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential To Emit (tons/year)	5.89E-06	3.36E-06	2.10E-04	5.05E-03	9.53E-06

**HAPs - Metals**

Emission Factor (lb/MMCF)	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential To Emit (tons/year)	1.40E-06	3.08E-06	3.92E-06	1.07E-06	5.89E-06

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 1-4.2, 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  
SUMMARY**

**Company Name:** Quality Wood Products  
**Address:** 2933 Thorne Drive, Elkhart, Indiana 46514  
**Permit:** 039-20028  
**Plt ID:** 039-00571  
**Reviewer:** ERG/SD  
**Date:** October 21, 2004

**POTENTIAL TO EMIT IN TONS PER YEAR**

<b>Emission Unit</b>	<b>PM</b>	<b>PM10</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>VOC</b>	<b>CO</b>	<b>* Single HAP</b>	<b>Combination of HAPs</b>
Paint Booth	7.17	7.17	0.0	0.0	80.7	0.0	4.83	9.39
Woodworking	33.7	33.7	0.0	0.0	0.0	0.0	0.0	0.0
Combustion	0.02	0.02	0.002	0.28	0.02	0.24	negligible	5.29E-03
<b>TOTAL</b>	40.9	40.9	0.002	0.28	80.7	0.24	4.83	9.39

\* Toluene