



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: December 12, 2006
RE: Cabinets By Nichols, Inc. / 081-22654-00033
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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Indianapolis, Indiana 46204-2251
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Minor Source Operating Permit OFFICE OF AIR QUALITY

Cabinets by Nichols, Inc.
40 West Old Plank Road (69 W SR 144)
Bargersville, Indiana 46106

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

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

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

Operation Permit No.: 081-22654-00033	
Original signed by Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: December 12, 2006 Expiration Date: December 12, 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 through 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 wood cabinet manufacturing source.

Authorized Individual:	Robert E. Nichols, Jr./President
Source Address:	40 West Old Plank Road (69 W SR 144), Bargersville, IN 46106
Mailing Address:	P.O. Box 545, Bargersville IN 46106
General Source Phone Number:	(317) 422-5188
SIC Code:	2434
County Location:	Johnson
Source Status:	Source Location Status: Nonattainment for 8-Hour Ozone and PM _{2.5} Attainment for all other criteria pollutants Minor Source Operating Permit Program Minor Source, under PSD, Emission Offset, and Nonattainment NSR Minor Source, Section 112 of the Clean Air Act

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) woodworking facility, identified as WW-1, operating at a maximum rate of 171.72 pounds of solid wood per hour and 187.03 pounds of plywood per hour (total of 358.75 pounds per hour), utilizing a baghouse (ID #BW-1) for particulate emission control, exhausting back into the building through vent S/V ID# 1;
- (b) One (1) flat paint coating line, consisting of three (3) spray booths, identified as PB-15, PB-16, and PB-17, constructed in 1986, 1994, and 1974 (after October 7), respectively, each operating at a maximum rate of 360 parts per hour, each equipped with high volume low pressure (HVLP) spray equipment and dry filters for particulate emission control, exhausting through stacks ID # 15, 16, and 17, respectively. Spray booths PB-15, PB-16, and PB-17 have a maximum capacity of 0.79, 0.13, and 0.79 gallons per hour, respectively;
- (c) One (1) spray paint coating line, consisting of three (3) spray booths, identified as PB-21, PB-22, and PB-23, each constructed in 1999, each operating at a maximum rate of 90 parts per hour, each equipped with high volume low pressure (HVLP) spray equipment and dry filters for particulate emission control, exhausting through stacks ID # 21, 22, and 23, respectively. Spray booths PB-21, PB-22, and PB-23 have a maximum capacity of 0.59, 0.79, and 0.04 gallons per hour, respectively;
- (d) Natural-gas fired combustion sources with heat input equal to or less than ten (10) mmBtu per hour:
 - (1) Two (2) drying ovens on the spray paint line, each with a maximum heat input capacity of one (1) mmBtu per hour;

- (e) Infrared cure equipment:
 - (1) One (1) drying oven for the flat paint coating line; and
- (f) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, 081-22654-00033, 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, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability

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

B.5 Severability

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

B.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

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

B.8 Certification

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

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

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

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

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

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

PMP 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 MSOP 081-22654-00033 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

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

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

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

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

Request for renewal shall be submitted to:

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

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

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

- (a) Permit amendments and revision 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.15 Source Modification Requirement

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

B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][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 any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

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

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

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

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

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

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

C.3 Opacity [326 IAC 5-1]

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

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

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

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

C.5 Stack Height [326 IAC 1-7]

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

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

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

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are 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.7 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.9 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.10 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.11 Instrument Specifications [326 IAC 2-1.1-11]

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

Corrective Actions and Response Steps

C.12 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.13 Actions Related to Noncompliance Demonstrated by a Stack Test

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

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

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

C.14 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.15 General Record Keeping Requirements[326 IAC 2-6.1-5]

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

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

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

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

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

Reports required in this part shall be submitted to:

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

- (e) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) woodworking facility, identified as WW-1, operating at a maximum rate of 171.72 pounds of solid wood per hour and 187.03 pounds of plywood per hour (total of 358.75 pounds per hour), utilizing a baghouse (ID #BW-1) for particulate emission control, exhausting back into the building through vent S/V ID# 1.

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

Emission Limitations and Standards

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the woodworking facilities shall not exceed 1.30 pounds per hour when operating at a process weight rate of 358.75 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.1.2 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.1.3 Particulate Control

In order to comply with condition D.1.1, the baghouse for particulate control shall be in operation and control emissions from the woodworking operations, identified as WW-1, at all times that the woodworking operations are in operation.

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

D.1.4 Visible Emissions Notations

- (a) Daily visible emission notations of the woodworking operations 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.1.5 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse used in conjunction with the woodworking operations, at least once weekly when the woodworking process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.6 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.1.7 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of daily visible emission notations of the woodworking operations stack exhaust.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain the following:
 - (1) Weekly records of the pressure drop during normal operation when venting to the atmosphere.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 EMISSIONS UNITS OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) flat paint coating line, consisting of three (3) spray booths, identified as PB-15, PB-16, and PB-17, constructed in 1986, 1994, and 1974 (after October 7), respectively, each operating at a maximum rate of 360 parts per hour, each equipped with high volume low pressure (HVLP) spray equipment and dry filters for particulate emission control, exhausting through stacks ID # 15, 16, and 17, respectively. Spray booths PB-15, PB-16, and PB-17 have a maximum capacity of 0.79, 0.13, and 0.79 gallons per hour, respectively.
- (b) One (1) spray paint coating line, consisting of three (3) spray booths, identified as PB-21, PB-22, and PB-23, each constructed in 1999, each operating at a maximum rate of 90 parts per hour, each equipped with high volume low pressure (HVLP) spray equipment and dry filters for particulate emission control, exhausting through stacks ID # 21, 22, and 23, respectively. Spray booths PB-21, PB-22, and PB-23 have a maximum capacity of 0.59, 0.79, and 0.04 gallons per hour, respectively.

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

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating (from the flat paint coating line booth PB-16 and spray booths PB-21, PB-22 and PB-23) 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.2.2 Particulate [326 IAC 6-3-2(d)]

- (a) Particulate from the surface coating (from the flat paint coating line booths PB-15, PB-16, and PB-17, and spray booths PB-21, PB-22 and PB-23) 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 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.2.3 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 the paint coating lines and any control devices.

**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:	Cabinets by Nichols, Inc.
Address:	40 West Old Plank Road
City:	Bargersville, Indiana 46106
Phone #:	(317) 422-5188
MSOP #:	081-22654-00033

I hereby certify that Cabinets by Nichols, Inc. is still in operation.
 no longer in operation.

I hereby certify that Cabinets by Nichols, Inc. is
 in compliance with the requirements of **MSOP 081-22654-00033**.
 not in compliance with the requirements of **MSOP 081-22654-00033**.

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

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

Noncompliance:

MALFUNCTION REPORT

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

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

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

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

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

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

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

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

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

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

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

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

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

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

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

326 IAC 1-6-1 Applicability of rule

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

326 IAC 1-2-39 "Malfunction" definition

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

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

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

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

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

Source Background and Description

Source Name:	Cabinets by Nichols, Inc.
Source Location:	40 West Old Plank Road, Bargersville, Indiana 46106
County:	Johnson
SIC Code:	2434
Operation Permit No.:	F081-18210-00033
Operation Permit Issuance Date:	October 14, 2004
Permit No.:	MSOP 081-22654-00033
Permit Reviewer:	Tanya White/EVP

The Office of Air Quality (OAQ) has reviewed an application from Cabinets by Nichols, Inc. relating to the operation of a stationary wood cabinet manufacturing source. This source was initially permitted under a Federally Enforceable State Operating Permit (FESOP). On January 31, 2006 Cabinets by Nichols, Inc. requested a transition of their Federally Enforceable State Operating Permit (081-18210-00033) to a Minor Source Operating Permit since the facility's potential to emit was shown to be below FESOP thresholds when recalculated using more accurate emission factors.

Permitted Emission Units and Pollution Control Equipment

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

- (a) One (1) woodworking facility, identified as WW-1, operating at a maximum rate of 171.72 pounds of solid wood per hour and 187.03 pounds of plywood per hour (total of 358.75 pounds per hour), utilizing a baghouse (ID #BW-1) for particulate emission control, exhausting back into the building through vent S/V ID# 1;
- (b) One (1) flat paint coating line, consisting of three (3) spray booths, identified as PB-15, PB-16, and PB-17, constructed in 1986, 1994, and 1974 (after October 7), respectively, each operating at a maximum rate of 360 parts per hour, each equipped with high volume low pressure (HVLP) spray equipment and dry filters for particulate emission control, exhausting through stacks ID # 15, 16, and 17, respectively. Spray booths PB-15, PB-16, and PB-17 have a maximum capacity of 0.79, 0.13, and 0.79 gallons per hour, respectively;
- (c) One (1) spray paint coating line, consisting of three (3) spray booths, identified as PB-21, PB-22, and PB-23, each constructed in 1999, each operating at a maximum rate of 90 parts per hour, each equipped with high volume low pressure (HVLP) spray equipment and dry filters for particulate emission control, exhausting through stacks ID # 21, 22, and 23, respectively. Spray booths PB-21, PB-22, and PB-23 have a maximum capacity of 0.59, 0.79, and 0.04 gallons per hour, respectively;
- (d) Natural-gas fired combustion sources with heat input equal to or less than ten (10) mmBtu per hour:
 - (1) Two (2) drying ovens on the spray paint line, each with a maximum heat input capacity of one (1) mmBtu per hour;
- (e) Infrared cure equipment:
 - (1) One (1) drying oven for the flat paint coating line; and

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

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 the previous approvals including, but not limited to, the following:

- (a) FESOP 081-18210-00033 issued on October 14, 2004.

This source was initially permitted under a Federally Enforceable State Operating Permit (FESOP). On January 31, 2006 Cabinets by Nichols, Inc. requested a transition of their Federally Enforceable State Operating Permit (081-18210-00033) to a Minor Source Operating Permit since the facility's potential to emit was shown to be below FESOP thresholds when recalculated using more accurate emission factors. Previously, the potential uncontrolled PM/PM₁₀ emissions were determined by back calculating the potential emissions using the controlled potential emissions and the control efficiency. This method overestimated the potential uncontrolled PM/PM₁₀ emissions from the woodworking operations. To calculate a more accurate potential to emit for woodworking operations, emissions from the woodworking operations were determined by weighing the amount of particulate matter that was delivered to the baghouse on a daily basis. As a conservative estimate, all material collected in the baghouse was assumed to PM₁₀. The daily amount collected was then scaled-up to be representative of operations at 8,760 hours per year.

All conditions from previous approvals were incorporated into this permit except the following because these requirements are applicable to Federally Enforceable State Operating Permits:

~~A.4 FESOP Applicability [326 IAC 2-8-2]~~

~~This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).~~

~~C.2 Overall Source Limit [326 IAC 2-8]~~

~~The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.~~

~~(a) Pursuant to 326 IAC 2-8:~~

- ~~(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;~~
- ~~(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and~~
- ~~(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.~~

- (b) ~~This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.~~
- (c) ~~Section D of this permit contains independently enforceable provisions to satisfy this requirement.~~

~~D.2.1 Volatile Organic Compounds (VOC) Nonattainment New Source Review Minor Limit [326 IAC 2-1.1-5] [326 IAC 2-8-4]~~

~~Pursuant to 326 IAC 2-8-4, the total combined VOC input usage at the flat and spray paint coating lines, including but not limited to the usage of sealants, bonding materials, adhesives, caulks, wood stains, paints and undercoatings, ceiling texture, cleaners and VOC solvents, shall be limited to less than 99.85 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This usage limit, including the potential to emit for insignificant activities, is required to limit the source wide potential to emit of VOC to less than 100 tons per year.~~

~~Compliance with this limitation shall make the requirements of 326 IAC 2-7 (Part 70) and Nonattainment NSR (326 IAC 2-1.1-5) not applicable to the source.~~

~~D.2.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4]~~

(a) ~~Pursuant to 326 IAC 2-8-4, the total combined input usage of any single hazardous air pollutant (HAP) at the flat and spray paint coating lines shall be limited to less than 10 tons per twelve (12) consecutive month period. Compliance with this condition shall limit the source wide potential to emit a single HAP to less than 10 tons per twelve (12) consecutive month period with compliance determined at the end of each month.~~

(b) ~~Pursuant to 326 IAC 2-8-4, the total combined input usage of all hazardous air pollutants (HAPs) at the flat and spray paint coating lines shall be limited to less than 25 tons per twelve (12) consecutive month period. Compliance with this condition shall limit the source wide potential to emit total HAPs to less than 25 tons per 12 consecutive month period with compliance determined at the end of each month.~~

~~Compliance with these limitations shall make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source.~~

~~D.2.9 Record Keeping Requirements~~

(a) ~~To document compliance with Conditions D.2.1 and D.2.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAP usage limits and/or the VOC and HAP emission limits established in Condition D.2.1 and D.2.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.~~

(1) ~~The amount, and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;~~

- ~~(2) — A log of the dates of use;~~
 - ~~(3) — The total VOC usage for each month;~~
 - ~~(4) — The total individual and combined HAP usage for each month;~~
 - ~~(5) — The weight of VOCs emitted for each compliance period; and~~
 - ~~(6) — The weight of total individual and combined HAPs emitted for each compliance period.~~
- ~~(b) — To document compliance with Condition D.2.8, the Permittee shall maintain a log of weekly overspray observations, once per day and monthly inspections, and these additional inspections prescribed by the Preventive Maintenance Plan.~~
- ~~(c) — All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.~~

~~D.2.10 Reporting Requirements~~

~~A quarterly summary of the information to document compliance with Condition D.2.1 and D.2.2 shall be submitted to the address listed in Section C – General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).~~

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.

A complete application for the purposes of this review was received on February 10, 2006.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 through 6).

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 Emissions (tons/yr)
PM	56.12
PM-10	56.17
SO ₂	0.01
VOC	77.48
CO	0.74
NO _x	0.88

HAPs	Potential Emissions (tons/yr)
Xylene	Less than 10
Toluene	Less than 10
Formaldehyde	Less than 10
Methanol	Less than 10
Ethyl Benzene	Less than 10
MIBK	Less than 10
Total HAPs	Less than 25

- (a) The potential to emit of all regulated pollutants are less than 100 tons per year and the potential to emit of particulate matter and volatile organic compounds (VOCs) are greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.
- (b) The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.

County Attainment Status

The source is located in Johnson County.

Pollutant	Status
PM-10	Attainment
PM-2.5	Nonattainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Nonattainment
CO	Attainment

- (a) On August 7, 2006, a temporary emergency rule took effect revoking the one-hour ozone standard in Indiana. The Indiana Air Pollution Control Board has approved a permanent rule revision to incorporate this change into 326 IAC 1-4-1. A permanent revision to 326 IAC 1-4-1 will take effect prior to the expiration of the emergency rule.

- (b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) 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. Johnson 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) U.S.EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Johnson County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM10 emissions as surrogate for PM2.5 emissions pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability for the source section.
- (d) Johnson 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 for the source section.
- (e) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

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

Pollutant	Emissions (tons/yr)
PM	1.06
PM-10	1.11
SO ₂	0.01
VOC	77.48
CO	0.74
NO _x	0.88
Single HAP (Xylene)	8.26
Combination HAPs	9.65

- (a) This existing source is not a major stationary source for PSD, Emission Offset, and Nonattainment NSR because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or greater, no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on application submitted by the source.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit MSOP 081-22654-00033, is still 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 all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in this permit.
- (b) This source is not subject to the requirements of the National Emission Standards for Wood Furniture Manufacturing Operations 40 CFR 63, Subpart JJ, because the source does not emit more than 10 tons per year of a single HAP or more than 25 tons per year of combined HAPs, and hence is not a major source of HAPs pursuant to 40 CFR Part 63.2.
- (c) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20, (40 CFR Part 63, Subpart QQQQ for Wood Building products Surface Coating), effective as of May 28, 2003, because the source is not a major source of hazardous air pollutants pursuant to 40 CFR Part 63.2.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in this permit.
- (e) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this source because this source is an MSOP source and is not a major Part 70 source. Therefore, the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not applicable to this source.

State Rule Applicability – Entire Source

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

This source, which is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, has potential emissions of all attainment regulated pollutants less than 250 tons per year. Therefore, this source is not subject to the requirements of 326 IAC 2-2, PSD.

326 IAC 2-3 (Emission Offset)

Johnson County has been designated as nonattainment for the 8-hour ozone standard. However, since the potential to emit of VOC and NOx are each less than 100 tons per year, this source is a minor source under Emission Offset and is not subject to the requirements of 326 IAC 2-3, Emission Offset.

326 IAC 2-1.1-5 (Non-attainment New Source Review)

Johnson County has been designated as nonattainment for the PM-2.5 standard; However, since the potential to emit of PM-2.5 is less than 100 tons per year, this source is a minor source of PM-2.5 emissions and is not subject to the requirements of 326 IAC 2-1.1-5, Non-attainment New Source Review.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake or Porter counties, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

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

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

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

The operation of this wood cabinet manufacturing source will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

State Rule Applicability – Individual Facilities

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

Pursuant to 326 IAC 6-3-2(d), particulate from the surface coating shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

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

Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground; and

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

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

The particulate from woodworking operations (WW-1) shall be limited to 1.30 pounds per hour or less when operating at a maximum process weight rate of 358.75 (187.03 plus 171.72 pounds per hour) pounds per hour.

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

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

In this case $P = 0.1794$ tons per hour; Therefore $E = 4.10 (0.1794)^{0.67} = 1.30$ pounds per hour

The woodworking facility is equipped with a baghouse for particulate control with a 99.9% control efficiency. Utilizing the baghouse for PM control, the maximum controlled particulate emission rate from the woodworking operation is 0.046 pound per hour, which is less than 1.30 pound of particulate per hour. Therefore, the woodworking operation shall comply with 326 IAC 6-3-2 by using a baghouse for particulate control at all times during operation.

The baghouse shall be in operation at all times the woodworking operations are in operation, in order to comply with this limit.

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

Pursuant to 326 IAC 8-2-1 (Applicability) and 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the flat paint coating line (PB-16) and the spray paint coating lines (PB-21, PB-22, PB-23) are subject to the requirements of 326 IAC 8-2-12 because the units were constructed after July 1, 1990, and have actual emissions of greater than 15 pounds of VOC per day before add-on controls. Pursuant to 326 IAC 8-2-1(a)(4), the owner or operator of a facility as described in 326 IAC 8-2-12(a) and meeting the applicability requirements of 326 IAC 8-2-1 shall be subject to the rule therein. The flat paint coating line (PB-16) and the spray paint coating line (PB-21, PB-22, PB-23) are subject to the requirements of 326 IAC 8-2-12 because they are used to surface coat wood furniture and cabinets.

Flat paint coating line booths, identified as PB-15 and PB-17, constructed in 1986 and 1974, respectively, are not subject to the requirements of 326 IAC 8-2-12 because these facilities are not located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph Counties, and these facilities do not have potential emissions of 100 tons per year or greater of VOC.

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets in booths PB-16, PB-21, PB-22, and PB-23 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.

The flat and the spray paint coating lines will utilize High Volume Low Pressure (HVLP) Spray Application systems in order to comply with the requirements of 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating).

326 IAC 8-11 (Wood Furniture Coating)

This source is not subject to 326 IAC 8-11. This rule applies to any person performing wood furniture operations in Lake, Porter, Clark or Floyd County and the operations have a potential to emit of VOCs of more than 25 tons per year. This source is located in Johnson County. Therefore, this rule is not applicable to this source.

326 IAC 8-2-10 (Flat Wood Panels; Manufacturing Operations)

Pursuant to 326 IAC 8-2-1(a)(2), the requirements of 326 IAC 8-2-10 are not applicable to the paint coating lines at the source, because the source does not manufacture any type of flat wood panels.

326 IAC 8-1-6 (General Volatile Organic Compound Reduction Requirements)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compound (VOC) emissions of 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8. This rule does not apply to PB-16, PB-21, PB-22, and PB-23 because these facilities are subject to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating) and these facilities have a potential to emit of VOCs of less than 25 tons per year each.

Spray booth PB-15, constructed in 1986, is not subject to 326 IAC 8-1-6 because the potential to emit of VOCs from the facility is less than 25 tons per year. Spray booth PB-17, constructed in 1974 is not subject to 326 IAC 8-1-6 because it was constructed before January 1, 1980.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This rule applies to sources existing as of January 1, 1980, located in Lake and Marion Counties, as well as to facilities commencing operation after October 7, 1974 and prior to January 1, 1980 that are located anywhere in the state, with potential VOC emissions of 100 tons per year or more, and not regulated by any other provision of Article 8. This rule does not apply to this source because the source has a potential to emit of VOCs of less than 100 tons per year. Also, each spray booth, excluding booth PB-17 (constructed after October 7, 1974), was constructed after January 1, 1980.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties)

The requirements of this rule apply to stationary sources located in Lake, Porter, Clark and Floyd Counties that emit or have the potential to emit VOCs at levels equal to or greater than 25 tons per year in Lake and Porter Counties; 100 tons per year in Clark and Floyd Counties; and to any coating facility that emits or has the potential to emit 10 tons per year or greater in Lake, Porter, Clark or Floyd County. The source is located in Johnson County. Therefore, this rule is not applicable to this source.

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

The requirements of 326 IAC 6-2 are not applicable to the drying ovens, because these units are not indirect heating facilities as defined in 326 IAC 1-2-19.

Conclusion

The operation of this wood cabinet manufacturing source shall be subject to the conditions of the Minor Source Operating Permit 081-22654-00033.

**Appendix A: Emission Calculations
Summary**

**Company Name: Cabinets by Nichols, Inc.
Address City IN Zip: 69 West State Road 144, Bargersville, IN 46106
Permit No.: MSOP 081-22654-00033
Reviewer: Tanya White/EVP
Date: December-06**

Uncontrolled Potential Emissions (tons/year)

Emissions Generating Activity				
Pollutant	Natural Gas	Surface Coating	Woodworking	TOTAL
	Combustion	Operations	Operations	
PM	0.02	9.93	46.17	56.12
PM10	0.07	9.93	46.17	56.17
SO2	0.01	0.00	0.00	0.01
NOx	0.88	0.00	0.00	0.88
VOC	0.05	77.43	0.00	77.48
CO	0.74	0.00	0.00	0.74
total HAPs	0.02	9.65	0.00	9.66
worst case single HAP	0.02	8.26	0.00	
	Hexane	Xylene		

Total emissions based on rated capacity at 8,760 hours/year.

Controlled Potential Emissions (tons/year)

Emissions Generating Activity				
Pollutant	Natural Gas	Surface Coating	Woodworking	TOTAL
	Combustion	Operations	Operations	
PM	0.02	0.99	0.05	1.06
PM10	0.07	0.99	0.05	1.11
SO2	0.01	0.00	0.00	0.01
NOx	0.88	0.00	0.00	0.88
VOC	0.05	77.43	0.00	77.48
CO	0.74	0.00	0.00	0.74
total HAPs	0.02	9.65	0.00	9.66
worst case single HAP	0.02	8.26	0.00	
	Hexane	Xylene		

Total emissions based on rated capacity at 8,760 hours/year, after enforceable control and limits.

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

Company Name: Cabinets by Nichols, Inc.
Address City IN Zip: 69 West State Road 144, Bargersville, IN 46106
Permit No.: MSOP 081-22654-00033
Reviewer: Tanya White/EVP
Date: December-06

PB-15										
Coating Material	Density (Lb/Gal)	Lb VOC/Gal of Coating	Lb Solids / Gal of Coating	Potential Usage (Gal/hr)	Potential Usage (Gal/Yr)	Potential VOC Pounds per Hour	Potential VOC Pounds per Day	Potential VOC Tons per Year	Particulate Potential Ton/Yr	Transfer Efficiency (%)
Primer	9.04	3.58	5.47	0.11	963.60	0.39	9.45	1.72	0.92	65%
Stain	8.08	4.94	3.14	0.24	2102.40	1.19	28.45	5.19	1.16	65%
Catalyst	7.48	6.04	1.45	0.19	1664.40	1.15	27.54	5.03	0.42	65%
GrainTone Reducer	6.83	6.83	0.00	0.05	438.00	0.34	8.20	1.50	0.00	65%
Thinner	6.98	6.98	0.00	0.20	1752.00	1.40	33.50	6.11	0.00	65%

PB-16										
Coating Material	Density (Lb/Gal)	Lb VOC/Gal of Coating	Lb Solids / Gal of Coating	Potential Usage (Gal/hr)	Potential Usage (Gal/Yr)	Potential VOC Pounds per Hour	Potential VOC Pounds per Day	Potential VOC Tons per Year	Particulate Potential Ton/Yr	Transfer Efficiency (%)
Primer	9.04	3.58	5.47	0.02	175.20	0.07	1.72	0.31	0.17	65%
Stain	8.08	4.94	3.14	0.04	350.40	0.20	4.74	0.87	0.19	65%
Catalyst	7.48	6.04	1.45	0.03	262.80	0.18	4.35	0.79	0.07	65%
GrainTone Reducer	6.83	6.83	0.00	0.01	87.60	0.07	1.64	0.30	0.00	65%
Thinner	6.98	6.98	0.00	0.03	262.80	0.21	5.03	0.92	0.00	65%

PB-17										
Coating Material	Density (Lb/Gal)	Lb VOC/Gal of Coating	Lb Solids / Gal of Coating	Potential Usage (Gal/hr)	Potential Usage (Gal/Yr)	Potential VOC Pounds per Hour	Potential VOC Pounds per Day	Potential VOC Tons per Year	Particulate Potential Ton/Yr	Transfer Efficiency (%)
Primer	9.04	3.58	5.47	0.11	963.60	0.39	9.45	1.72	0.92	65%
Stain	8.08	4.94	3.14	0.24	2102.40	1.19	28.45	5.19	1.16	65%
Catalyst	7.48	6.04	1.45	0.19	1664.40	1.15	27.54	5.03	0.42	65%
GrainTone Reducer	6.83	6.83	0.00	0.05	438.00	0.34	8.20	1.50	0.00	65%
Thinner	6.98	6.98	0.00	0.20	1752.00	1.40	33.50	6.11	0.00	65%

PB-21										
Coating Material	Density (Lb/Gal)	Lb VOC/Gal of Coating	Lb Solids / Gal of Coating	Potential Usage (Gal/hr)	Potential Usage (Gal/Yr)	Potential VOC Pounds per Hour	Potential VOC Pounds per Day	Potential VOC Tons per Year	Particulate Potential Ton/Yr	Transfer Efficiency (%)
Primer	9.04	3.58	5.47	0.08	700.80	0.29	6.87	1.25	0.67	65%
Stain	8.08	4.94	3.14	0.18	1576.80	0.89	21.34	3.89	0.87	65%
Catalyst	7.48	6.04	1.45	0.14	1226.40	0.85	20.29	3.70	0.31	65%
GrainTone Reducer	6.83	6.83	0.00	0.04	350.40	0.27	6.56	1.20	0.00	65%
Thinner	6.98	6.98	0.00	0.15	1314.00	1.05	25.13	4.59	0.00	65%

PB-22										
Coating Material	Density (Lb/Gal)	Lb VOC/Gal of Coating	Lb Solids / Gal of Coating	Potential Usage (Gal/hr)	Potential Usage (Gal/Yr)	Potential VOC Pounds per Hour	Potential VOC Pounds per Day	Potential VOC Tons per Year	Particulate Potential Ton/Yr	Transfer Efficiency (%)
Primer	9.04	3.58	5.47	0.11	963.60	0.39	9.45	1.72	0.92	65%
Stain	8.08	4.94	3.14	0.24	2102.40	1.19	28.45	5.19	1.16	65%
Catalyst	7.48	6.04	1.45	0.19	1664.40	1.15	27.54	5.03	0.42	65%
GrainTone Reducer	6.83	6.83	0.00	0.05	438.00	0.34	8.20	1.50	0.00	65%
Thinner	6.98	6.98	0.00	0.20	1752.00	1.40	33.50	6.11	0.00	65%

PB-23										
Coating Material	Density (Lb/Gal)	Lb VOC/Gal of Coating	Lb Solids / Gal of Coating	Potential Usage (Gal/hr)	Potential Usage (Gal/Yr)	Potential VOC Pounds per Hour	Potential VOC Pounds per Day	Potential VOC Tons per Year	Particulate Potential Ton/Yr	Transfer Efficiency (%)
Primer	9.04	3.58	5.47	0.01	87.60	0.04	0.86	0.16	0.08	65%
Stain	8.08	4.94	3.14	0.01	87.60	0.05	1.19	0.22	0.05	65%
Catalyst	7.48	6.04	1.45	0.01	87.60	0.06	1.45	0.26	0.02	65%
GrainTone Reducer	6.83	6.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65%
Thinner	6.98	6.98	0.00	0.01	87.60	0.07	1.68	0.31	0.00	65%

Potential Emissions (tons/yr) = 77.43 9.93
Controlled Emissions (tons/yr)= 77.43 0.99

METHODOLOGY

VOC Emissions (tons/yr) = Potential Usage (gal/yr) * lb VOC/gal Coating * 1 ton/2,000 lbs
PM/PM10 Emissions (tons/yr) = Potential Usage (gal/yr) * lb solids/gal Coating * (1- Transfer Efficiency) * 1 ton/2,000 lbs
90% PM control for dry filters

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

**Company Name: Cabinets by Nichols, Inc.
Address City IN Zip: 69 West State Road 144, Bargersville, IN 46106
Permit No.: MSOP 081-22654-00033
Reviewer: Tanya White/EVP**

Date: December-06

Coating Material	Density (Lb/Gal)	Potential Usage (Gal/Yr)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Methanol	Weight % Ethylbenzene	Weight % DEHP	Weight % Benzene	Weight % Cumene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Methanol Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	DEHP Emissions (ton/yr)	Benzene Emissions (ton/yr)	Cumene Emissions (ton/yr)	Total HAP Emissions (ton/yr)	
Primer	9.04	963.60	8.22%	0.00%	0.03%	0.00%	0.05%	0.00%	0.00%	0.00%	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
Stain	8.08	2102.40	11.02%	0.38%	0.04%	0.54%	0.09%	0.11%	0.01%	0.01%	0.94	0.03	0.00	0.05	0.01	0.01	0.00	0.00	0.00	1.04
Catalyst	7.48	1664.40	1.66%	3.96%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
Grainstone Reducer	6.83	438.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thinner	6.98	1752.00	11%	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69

Coating Material	Density (Lb/Gal)	Potential Usage (Gal/Yr)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Methanol	Weight % Ethylbenzene	Weight % DEHP	Weight % Benzene	Weight % Cumene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Methanol Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	DEHP Emissions (ton/yr)	Benzene Emissions (ton/yr)	Cumene Emissions (ton/yr)	Total HAP Emissions (ton/yr)	
Primer	9.04	175.20	8.22%	0.00%	0.03%	0.00%	0.05%	0.00%	0.00%	0.00%	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
Stain	8.08	350.40	11.02%	0.38%	0.04%	0.54%	0.09%	0.11%	0.01%	0.01%	0.16	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.17
Catalyst	7.48	262.80	1.66%	3.96%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Grainstone Reducer	6.83	87.60	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thinner	6.98	262.80	11%	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10

Coating Material	Density (Lb/Gal)	Potential Usage (Gal/Yr)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Methanol	Weight % Ethylbenzene	Weight % DEHP	Weight % Benzene	Weight % Cumene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Methanol Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	DEHP Emissions (ton/yr)	Benzene Emissions (ton/yr)	Cumene Emissions (ton/yr)	Total HAP Emissions (ton/yr)	
Primer	9.04	963.60	8.22%	0.00%	0.03%	0.00%	0.05%	0.00%	0.00%	0.00%	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
Stain	8.08	2102.40	11.02%	0.38%	0.04%	0.54%	0.09%	0.11%	0.01%	0.01%	0.94	0.03	0.00	0.05	0.01	0.01	0.00	0.00	0.00	1.04
Catalyst	7.48	1664.40	1.66%	3.96%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
Grainstone Reducer	6.83	438.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thinner	6.98	1752.00	11%	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69

Coating Material	Density (Lb/Gal)	Potential Usage (Gal/Yr)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Methanol	Weight % Ethylbenzene	Weight % DEHP	Weight % Benzene	Weight % Cumene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Methanol Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	DEHP Emissions (ton/yr)	Benzene Emissions (ton/yr)	Cumene Emissions (ton/yr)	Total HAP Emissions (ton/yr)	
Primer	9.04	700.80	8.22%	0.00%	0.03%	0.00%	0.05%	0.00%	0.00%	0.00%	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
Stain	8.08	1576.80	11.02%	0.38%	0.04%	0.54%	0.09%	0.11%	0.01%	0.01%	0.70	0.02	0.00	0.03	0.01	0.01	0.00	0.00	0.00	0.78
Catalyst	7.48	1226.40	1.66%	3.96%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.08	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
Grainstone Reducer	6.83	350.40	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	0.00	0.00	0.00	0.00	0.00
Thinner	6.98	1314.00	11%	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52

Coating Material	Density (Lb/Gal)	Potential Usage (Gal/Yr)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Methanol	Weight % Ethylbenzene	Weight % DEHP	Weight % Benzene	Weight % Cumene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Methanol Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	DEHP Emissions (ton/yr)	Benzene Emissions (ton/yr)	Cumene Emissions (ton/yr)	Total HAP Emissions (ton/yr)	
Primer	9.04	963.60	8.22%	0.00%	0.03%	0.00%	0.05%	0.00%	0.00%	0.00%	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
Stain	8.08	2102.40	11.02%	0.38%	0.04%	0.54%	0.09%	0.11%	0.01%	0.01%	0.94	0.03	0.00	0.05	0.01	0.01	0.00	0.00	0.00	1.04
Catalyst	7.48	1664.40	1.66%	3.96%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
Grainstone Reducer	6.83	438.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thinner	6.98	1752.00	11%	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69

Coating Material	Density (Lb/Gal)	Potential Usage (Gal/Yr)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Methanol	Weight % Ethylbenzene	Weight % DEHP	Weight % Benzene	Weight % Cumene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Methanol Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	DEHP Emissions (ton/yr)	Benzene Emissions (ton/yr)	Cumene Emissions (ton/yr)	Total HAP Emissions (ton/yr)	
Primer	9.04	87.60	8.22%	0.00%	0.03%	0.00%	0.05%	0.00%	0.00%	0.00%	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Stain	8.08	87.60	11.02%	0.38%	0.04%	0.54%	0.09%	0.11%	0.01%	0.01%	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Catalyst	7.48	87.60	1.66%	3.96%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Grainstone Reducer	6.83	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thinner	6.98	87.60	11%	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03

Potential Emissions (tons/yr) = 8.26 1.10 0.02 0.18 0.04 0.04 0.00 0.00 9.65

METHODOLOGY

HAPS emission rate (tons/yr) = Potential Usage (gal/yr) * Density (lb/gal) * wt% HAP * 1 ton/2,000 lbs

Appendix A: Woodworking Particulate Emissions

Company Name: Cabinets by Nichols, Inc.
Address City IN Zip: 69 West State Road 144, Bargersville, IN 46106
Permit No.: MSOP 081-22654-00033
Reviewer: Tanya White/EVP
Date: December-06

Uncontrolled Potential Emissions (tons/year)							
A. Baghouse							
Process	PM/PM10 Delivered to Baghouse (lb/day)		Control Efficiency (%)	Potential PM/PM10 Emissions			
	Actual	Potential		Uncontrolled		Controlled	
				(lb/day)	(tons/yr)	(lb/day)	(tons/yr)
WW-1 (DC1)	50.00	253.00	99.90%	253.00	46.17	0.253	0.046

Total Emissions Based on Rated Capacity at 8,760 Hours/Year

Methodology:

Potential PM/PM10 Emissions = Actual PM/PM10 Delivered to Baghouse x 8,760 hours per year / (5 days/week x 8 hours/day x 52 weeks/year) x (1+ 20% Safety Factor)

Actual PM/PM10 delivered to the baghouse each day was determined by measuring the amount of PM collected from the dust collector during a normal operating day. Potential PM/PM10 generated per day was determined by scaling up actual numbers to 8,760 hours per year and including a 20% safety factor.

PM/PM10 Emissions = Potential PM/PM10 Delivered to Baghouse x 365 days/yr x 1 ton/2,000 lbs

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

Two (2) Drying Ovens (1 MMBtu/hr Each)

**Company Name: Cabinets by Nichols, Inc.
Address City IN Zip: 69 West State Road 144, Bargersville, IN 46106
Permit No.: MSOP 081-22654-00033
Reviewer: Tanya White/EVP
Date: December-06**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

2.0

17.5

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.02	0.07	0.01	0.88	0.05	0.74

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

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

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

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

Two (2) Drying Ovens (1 MMBtu/hr Each)

**Company Name: Cabinets by Nichols, Inc.
 Address City IN Zip: 69 West State Road 144, Bargersville, IN 46106
 Permit No.: M081-22654-00033
 Reviewer: Tanya White/EVP
 Date: December-06**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.840E-05	1.051E-05	6.570E-04	1.577E-02	2.978E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	4.380E-06	9.636E-06	1.226E-05	3.329E-06	1.840E-05

Methodology is the same as page 5.

The five highest organic and metal HAPs emission factors are provided above.