NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a
Minor Source Operating Permit (MSOP)

for Ayr Custom Cabinetry, Inc. in Marshall County

MSOP Renewal No.: M099-43830-00070

The Indiana Department of Environmental Management (IDEM) has received an application from Ayr Custom Cabinetry, Inc. located at 1074 US Highway 6, Nappannee, Indiana 46550 for a renewal of its MSOP issued on October 14, 2016. If approved by IDEM’s Office of Air Quality (OAQ), this proposed renewal would allow Ayr Custom Cabinetry, Inc. to continue to operate its existing source.

This draft permit does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

A copy of the permit application and IDEM’s preliminary findings have been sent to:

Bremen Public Library
304 N Jackson Street
Bremen, Indiana 46506

and

IDEM Northern Regional Office
300 North Dr. Martin Luther King Jr. Boulevard, Suite 450
South Bend, IN 46601-1295

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

A copy of the application and preliminary findings is also available via IDEM’s Virtual File Cabinet (VFC). To access VFC, please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

How can you participate in this process?

The date that this notice is posted on IDEM’s website (https://www.in.gov/idem/5474.htm) marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the air pollution impact of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will
make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM’s mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number M099-43830-00070 in all correspondence.

Comments should be sent to:

L. David Cohen  
IDEM, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
(800) 451-6027, ask for L. David Cohen or (317) 233-9327  
Or dial directly: (317) 233-9327  
Fax: (317) 232-6749 attn: L. David Cohen  
E-mail: LCohen@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/2358.htm; and the Citizens’ Guide to IDEM on the Internet at: https://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM’s response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM’s decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above and will also be sent to the local library indicated above, the IDEM Regional Office indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact L. David Cohen of my staff at the above address.

Madhurima D. Moulik, Ph.D., Section Chief  
Permits Branch  
Office of Air Quality
Minor Source Operating Permit Renewal
OFFICE OF AIR QUALITY

Ayr Custom Cabinetry, Inc.
1074 US Highway 6
Nappanee, Indiana 46550

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

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

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

<table>
<thead>
<tr>
<th>Operation Permit No.: M099-43830-00070</th>
</tr>
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<tbody>
<tr>
<td>Master Agency Interest ID: 32463</td>
</tr>
<tr>
<td>Issued by:</td>
</tr>
<tr>
<td>Madhurima D. Moulik, Ph.D., Section Chief</td>
</tr>
<tr>
<td>Permits Branch</td>
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<tr>
<td>Office of Air Quality</td>
</tr>
<tr>
<td>Issuance Date:</td>
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<tr>
<td>Expiration Date:</td>
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</tbody>
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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary wood kitchen cabinet and countertop manufacturing facility.

<table>
<thead>
<tr>
<th>Source Address:</th>
<th>1074 US Highway 6, Nappannee, Indiana 46550</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Source Phone Number:</td>
<td>574-773-7973</td>
</tr>
<tr>
<td>SIC Code:</td>
<td>2434 (Wood Kitchen Cabinets)</td>
</tr>
<tr>
<td>County Location:</td>
<td>Marshall</td>
</tr>
<tr>
<td>Source Location Status:</td>
<td>Attainment for all criteria pollutants</td>
</tr>
<tr>
<td>Source Status:</td>
<td>Minor Source Operating Permit Program</td>
</tr>
<tr>
<td></td>
<td>Minor Source, under PSD Rules</td>
</tr>
<tr>
<td></td>
<td>Minor Source, Section 112 of the Clean Air Act</td>
</tr>
<tr>
<td></td>
<td>Not 1 of 28 Source Categories</td>
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</tbody>
</table>

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 area, identified as WW1, constructed in 1968, with maximum capacity of six hundred eighty-eight (688) pounds per hour (lb/hr), using one (1) integral baghouse as particulate control, identified as P1, exhausting indoors and to vent P1 for emergency, and consisting of the following units:

1. One (1) Door Department, consisting of one (1) sander, one (1) router, one (1) grass hinge drill, two (2) shapers, and one (1) hinge machine;

2. One (1) Front Department, consisting of one (1) chop saw, two (2) mortisers, one (1) tenoner, and one (1) table saw;

3. One (1) Specialty Department, consisting of two (2) table saws, one (1) multi moulder, two (2) sanders, and one (1) shaper;

4. One (1) North Assembly Department, consisting of four (4) table saws, one (1) radial arm saw, one (1) band saw, three (3) routers, one (1) SF Scheer line boarding machine, two (2) sanders, one (1) planer, and one (1) joiner;

5. One (1) South Assembly Department, consisting of three (3) table saws, one (1) router, and two (2) sanders;

6. One (1) Upstairs Stock Room Department, consisting of one (1) radial arm saw, one (1) table saw, one (1) planer, and one (1) joiner;

7. One (1) Drawer Department, consisting of two (2) table saws, one (1) cut saw, one (1) chop saw, one (1) joiner, one (1) tenoner, three (3) shapers, and two (2) sanders; and
One (1) Final Finish Department, consisting of one (1) shaper.

(b) One (1) woodworking area, identified as WW2, constructed in 1990, with maximum capacity of six hundred eighty-eight (688) lb/hr, using one (1) integral baghouse as particulate control, identified as P2, exhausting indoors and to vent P2 for emergency, and consisting of the following units:

1. One (1) Millroom, consisting of one (1) panel router and three (3) table saws.

(c) Miscellaneous woodworking equipment used to supplement woodworking area WW1, identified as MW1, constructed in 2011, permitted in 2016, with a maximum capacity of four hundred (400) lb/hr, using no control, exhausting indoors, and consisting of the following units:

1. One (1) Door Department, consisting of one (1) chop saw, one (1) band saw, and one (1) hinge machine;
2. One (1) Front Department, consisting of one (1) mortiser, one (1) sander, and one (1) scroll saw;
3. One (1) Specialty Department, consisting of one (1) drill press, one (1) lathe, and one (1) chop saw;
4. One (1) North Assembly Department, consisting of five (5) chop saws, one (1) drill press, and one (1) sander;
5. One (1) South Assembly Department, consisting of one (1) band saw;
6. One (1) Drawer Department, consisting of one (1) sanding table;
7. One (1) Sanding Department, consisting of one (1) sanding table;
8. One (1) Finish Sanding Department, consisting of three (3) sanding tables;
9. One (1) Final Finish Department, consisting of one (1) band saw and one (1) sander; and
10. Various woodworking power hand tools.

(d) Miscellaneous woodworking equipment used to supplement woodworking area WW2, identified as MW2, constructed in 2011, permitted in 2016, with a maximum capacity of four hundred (400) lb/hr, using no control, exhausting indoors, and consisting of the following units:

1. One (1) Millroom, consisting of one (1) boarding machine and one (1) drill press;
2. One (1) Countertop Department, consisting of two (2) chop saws and one (1) sander; and
3. Various woodworking power hand tools.

(e) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 1, constructed in 1975, with a maximum capacity of two (2) cabinets per hour, using HVLFP spray applicators and dry filters as overspray control, and exhausting to vent V1a.

(f) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth
2, constructed in 1975, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vent V2a and to vent V2 for manual nighttime exhaust only.

(g) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 3, constructed in 1975, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vent V3a.

(h) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 4, constructed in 1981, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vent V4a.

(i) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 5, constructed in 2005, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vents V12 and V13.

(j) Two (2) countertop surface coating booths, identified as CB-1 and CB-2, constructed in 1990, with a combined maximum capacity of six hundred twenty-five thousandths (0.625) wood countertops per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vents V9 and V10, respectively.

(k) One (1) Color Match surface coating booth, identified as CM-1, constructed in 2020, with a maximum capacity of one (1) unit per day, using dry filters as overspray control, and exhausting to vent V14.

(l) One (1) water-based adhesive application process, that are less than or equal to 5% by volume of VOCs excluding HAPs, using flow coating.

(m) Natural gas-fired combustion units with a heat input less than or equal to ten million (10,000,000) British thermal units per hour (MMBtu/hr):

1. Two (2) natural gas-fired Air Make-Up Units, identified as AMU-1 and AMU-2, constructed in 2020, each with a maximum capacity of five and eighty-three hundredths (5.83) MMBtu/hr, using low NOx burners as control, and exhausting indoors.

2. One (1) natural gas-fired Air Make-Up Unit, identified as AMU-3, with a maximum heat input capacity of three (3) MMBtu/hr, using no control, and exhausting indoors.

3. One (1) natural gas-fired Air Make-Up Unit, identified as AMU-4, constructed in 2020, with a maximum capacity of one and forty-four hundredths (1.44) MMBtu/hr, using low NOx burners as control, and exhausting indoors.

(n) Paved and unpaved roads and parking lots with public access.
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, M099-43830-00070, is issued for a fixed term of ten (10) 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. 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 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:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 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.9 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(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.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

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

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

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

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

(c) 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.

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

B.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to M099-43830-00070 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.11 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 one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.12 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 an affirmation that the statements in the application are true and complete 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

(1) Submitted at least one hundred twenty (120) 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, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

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

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

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

B.15 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 reasonable times, 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 reasonable times, 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, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.16 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete 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.17 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-8590 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.18 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 5-1-1 (Applicability) and 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 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.
C.6  Fugitive Dust Emissions [326 IAC 6-4]

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

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

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

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

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

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

   (A) Asbestos removal or demolition start date;

   (B) Removal or demolition contractor; or

   (C) Waste disposal site.

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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.

(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 Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.

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

**Compliance Requirements [326 IAC 2-1.1-11]**

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

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

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

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

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

C.11 **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. The analog instrument shall be capable of measuring values outside of the normal range.
(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to 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 excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning 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 normal or usual manner of operation.

(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; and/or

(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 record the reasonable response steps 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 submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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.

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, startups or shutdowns of any emission unit or emission control equipment, that results in violations of applicable air pollution control regulations or applicable emission limitations must be kept and retained for a period of three (3) years and 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 emission unit or emission control equipment occurs that lasts more than one (1) hour, the condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification must be made by telephone or other electronic means, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of the occurrence.

(c) Failure to report a malfunction of any emission unit or emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information on the scope and expected duration of the malfunction must be provided, including the items specified in 326 IAC 1-6-2(c)(3)(A) through (E).

(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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.
SECTION D.1  EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) woodworking area, identified as WW1, constructed in 1968, with maximum capacity of six hundred eighty-eight (688) pounds per hour (lb/hr), using one (1) integral baghouse as particulate control, identified as P1, exhausting indoors and to vent P1 for emergency, and consisting of the following units:

1. One (1) Door Department, consisting of one (1) sander, one (1) router, one (1) grass hinge drill, two (2) shapers, and one (1) hinge machine;
2. One (1) Front Department, consisting of one (1) chop saw, two (2) mortisers, one (1) tenoner, and one (1) table saw;
3. One (1) Specialty Department, consisting of two (2) table saws, one (1) multi moulder, two (2) sanders, and one (1) shaper;
4. One (1) North Assembly Department, consisting of four (4) table saws, one (1) radial arm saw, one (1) band saw, three (3) routers, one (1) SF Scheer line boarding machine, two (2) sanders, one (1) planer, and one (1) joiner;
5. One (1) South Assembly Department, consisting of three (3) table saws, one (1) router, and two (2) sanders;
6. One (1) Upstairs Stock Room Department, consisting of one (1) radial arm saw, one (1) table saw, one (1) planer, and one (1) joiner;
7. One (1) Drawer Department, consisting of two (2) table saws, one (1) cut saw, one (1) chop saw, one (1) joiner, one (1) tenoner, three (3) shapers, and two (2) sanders; and
8. One (1) Final Finish Department, consisting of one (1) shaper.

(b) One (1) woodworking area, identified as WW2, constructed in 1990, with maximum capacity of six hundred eighty-eight (688) lb/hr, using one (1) integral baghouse as particulate control, identified as P2, exhausting indoors and to vent P2 for emergency, and consisting of the following units:

1. One (1) Millroom, consisting of one (1) panel router and three (3) table saws.

(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 [326 IAC 2-6.1-5(a)(1)]

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

In order to assure that the two (2) woodworking areas are exempt from the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the baghouses (P1 and P2) shall be in operation and control emissions from the two (2) woodworking areas (Woodworking Area 1 and Woodworking Area 2) at all times that any one or more of these units are in operation.
D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Registrant's obligation with regard to the preventive maintenance plan required by this condition.
SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(e) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 1, constructed in 1975, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vent V1a.

(f) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 2, constructed in 1975, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vent V2a and to vent V2 for manual nighttime exhaust only.

(g) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 3, constructed in 1975, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vent V3a.

(h) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 4, constructed in 1981, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vent V4a.

(i) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 5, constructed in 2005, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vents V12 and V13.

(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 [326 IAC 2-6.1-5(a)(1)]

D.2.1 Particulate Emission Limitations [326 IAC 6-3-2(d)]

(a) Particulate from the surface coating booths, identified as Booth 1 through Booth 3, 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.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), when applying surface coatings to wood furniture and cabinets in the five (5) surface coating booths, identified as Booth 1 through Booth 5, the Permittee shall apply all coating material, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, using one (1) 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.2.3 Preventive Maintenance Plan  [326 IAC 1-6-3]

A Preventative Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.2.4 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.1(c), the Permittee shall maintain a record of any actions taken if overspray is visibly detected.

(b) To document the compliance status with Condition D.1.2, the Permittee shall maintain records of the amount of coating used for touch-up and repair operations per day.

(c) Section C - General Record Keeping Requirements of this permit contains the Permittee’s obligations with regard to the records required by this condition.
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT 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).

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>Ayr Custom Cabinetry, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Address:</td>
<td>1074 US Highway 6</td>
</tr>
<tr>
<td>City:</td>
<td>Nappanee, Indiana  46550</td>
</tr>
<tr>
<td>Phone #:</td>
<td>574-773-7973</td>
</tr>
<tr>
<td>MSOP #:</td>
<td>M099-43830-00070</td>
</tr>
</tbody>
</table>

I hereby certify that Ayr Custom Cabinetry, Inc. is:  
☐ still in operation.  
☐ no longer in operation.

I hereby certify that Ayr Custom Cabinetry, Inc. is:  
☐ in compliance with the requirements of MSOP M099-43830-00070.  
☐ not in compliance with the requirements of MSOP M099-43830-00070.

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.

<table>
<thead>
<tr>
<th>Noncompliance:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>


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? , 100 tons/year carbon monoxide? , 10 tons/year any single hazardous air pollutant? , 25 tons/year any combination hazardous air pollutant? , 1 tons/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: ________________ ________________ 
Inspection: ________________ ________________ 
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 (MSOP) Renewal

Source Description and Location

<table>
<thead>
<tr>
<th>Source Name:</th>
<th>Ayr Custom Cabinetry, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Location:</td>
<td>1074 US Highway 6, Nappanee, Indiana 46550</td>
</tr>
<tr>
<td>County:</td>
<td>Marshall County</td>
</tr>
<tr>
<td>SIC Code:</td>
<td>2434 (Wood Kitchen Cabinets)</td>
</tr>
<tr>
<td>Permit Renewal No.:</td>
<td>M099-43830-00070</td>
</tr>
<tr>
<td>Permit Reviewer:</td>
<td>L. David Cohen</td>
</tr>
</tbody>
</table>

On March 3, 2021, Ayr Custom Cabinetry, Inc. submitted an application to the Office of Air Quality (OAQ) requesting to renew its operating permit. OAQ has reviewed the operating permit renewal application from Ayr Custom Cabinetry, Inc. relating to the operation of a stationary wood kitchen cabinet and countertop manufacturing facility. Ayr Custom Cabinetry, Inc. was issued its first MSOP (M099-37519-00070) on October 14, 2016.

Existing Approvals

The source was issued MSOP No. M099-37519-00070 on October 14, 2016. The source has since received the following approval:


All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

(a) One (1) woodworking area, identified as WW1, constructed in 1968, with maximum capacity of six hundred eighty-eight (688) pounds per hour (lb/hr), using one (1) integral baghouse as particulate control, identified as P1, exhausting indoors and to vent P1 for emergency, and consisting of the following units:

- (1) One (1) Door Department, consisting of one (1) sander, one (1) router, one (1) grass hinge drill, two (2) shapers, and one (1) hinge machine;
- (2) One (1) Front Department, consisting of one (1) chop saw, two (2) mortisers, one (1) tenoner, and one (1) table saw;
- (3) One (1) Specialty Department, consisting of two (2) table saws, one (1) multi moulder, two (2) sanders, and one (1) shaper;
- (4) One (1) North Assembly Department, consisting of four (4) table saws, one (1) radial arm saw, one (1) band saw, three (3) routers, one (1) SF Scheer line boarding machine, two (2) sanders, one (1) planer, and one (1) joiner;
- (5) One (1) South Assembly Department, consisting of three (3) table saws, one (1) router, and two (2) sanders;
(6) One (1) Upstairs Stock Room Department, consisting of one (1) radial arm saw, one (1) table saw, one (1) planer, and one (1) joiner;

(7) One (1) Drawer Department, consisting of two (2) table saws, one (1) cut saw, one (1) chop saw, one (1) joiner, one (1) tenoner, three (3) shapers, and two (2) sanders; and

(8) One (1) Final Finish Department, consisting of one (1) shaper.

(b) One (1) woodworking area, identified as WW2, constructed in 1990, with maximum capacity of six hundred eighty-eight (688) lb/hr, using one (1) integral baghouse as particulate control, identified as P2, exhausting indoors and to vent P2 for emergency, and consisting of the following units:

(1) One (1) Millroom, consisting of one (1) panel router and three (3) table saws.

(c) Miscellaneous woodworking equipment used to supplement woodworking area WW1, identified as MW1, constructed in 2011, permitted in 2016, with a maximum capacity of four hundred (400) lb/hr, using no control, exhausting indoors, and consisting of the following units:

(1) One (1) Door Department, consisting of one (1) chop saw, one (1) band saw, and one (1) hinge machine;

(2) One (1) Front Department, consisting of one (1) mortiser, one (1) sander, and one (1) scroll saw;

(3) One (1) Specialty Department, consisting of one (1) drill press, one (1) lathe, and one (1) chop saw;

(4) One (1) North Assembly Department, consisting of five (5) chop saws, one (1) drill press, and one (1) sander;

(5) One (1) South Assembly Department, consisting of one (1) band saw;

(7) One (1) Drawer Department, consisting of one (1) sanding table;

(8) One (1) Sanding Department, consisting of one (1) sanding table;

(9) One (1) Finish Sanding Department, consisting of three (3) sanding tables;

(10) One (1) Final Finish Department, consisting of one (1) band saw and one (1) sander; and

(11) Various woodworking power hand tools.

(d) Miscellaneous woodworking equipment used to supplement woodworking area WW2, identified as MW2, constructed in 2011, permitted in 2016, with a maximum capacity of four hundred (400) lb/hr, using no control, exhausting indoors, and consisting of the following units:

(1) One (1) Millroom, consisting of one (1) boarding machine and one (1) drill press;

(2) One (1) Countertop Department, consisting of two (2) chop saws and one (1) sander; and

(3) Various woodworking power hand tools.

(e) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 1, constructed in 1975, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vent V1a.
(f) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 2, constructed in 1975, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vent V2a and to vent V2 for manual nighttime exhaust only.

(g) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 3, constructed in 1975, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vent V3a.

(h) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 4, constructed in 1981, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vent V4a.

(i) One cabinet surface coating booth, applying sealer, stain and topcoat, identified as Booth 5, constructed in 2005, with a maximum capacity of two (2) cabinets per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vents V12 and V13.

(j) Two (2) countertop surface coating booths, identified as CB-1 and CB-2, constructed in 1990, with a combined maximum capacity of six hundred twenty-five thousandths (0.625) wood countertops per hour, using HVLP spray applicators and dry filters as overspray control, and exhausting to vents V9 and V10, respectively.

(k) One (1) Color Match surface coating booth, identified as CM-1, constructed in 2020, with a maximum capacity of one (1) unit per day, using dry filters as overspray control, and exhausting to vent V14.

(l) One (1) water-based adhesive application process, that are less than or equal to 5% by volume of VOCs excluding HAPs, using flow coating.

(m) Natural gas-fired combustion units with a heat input less than or equal to ten million (10,000,000) British thermal units per hour (MMBtu/hr):

1. Two (2) natural gas-fired Air Make-Up Units, identified as AMU-1 and AMU-2, constructed in 2020, each with a maximum capacity of five and eighty-three hundredths (5.83) MMBtu/hr, using low NOx burners as control, and exhausting indoors.

2. One (1) natural gas-fired Air Make-Up Unit, identified as AMU-3, with a maximum heat input capacity of three (3) MMBtu/hr, using no control, and exhausting indoors.

3. One (1) natural gas-fired Air Make-Up Unit, identified as AMU-4, constructed in 2020, with a maximum capacity of one and forty-four hundredths (1.44) MMBtu/hr, using low NOx burners as control, and exhausting indoors.

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

**Emission Units and Pollution Control Equipment Removed From the Source**

No units will be removed as part of this MSOP Renewal.

**“Integral Part of the Process” Determination**

In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge (“ALJ”) Garrettson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, the potential to emit particulate...
matter from the woodworking operations was calculated after control for purposes of determining permitting level and applicability of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

### Enforcement Issue

There are no enforcement actions pending.

### Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

### County Attainment Status

The source is located in Marshall County.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>Better than national standards.</td>
</tr>
<tr>
<td>CO</td>
<td>Unclassifiable or attainment effective November 15, 1990.</td>
</tr>
<tr>
<td>O₃</td>
<td>Unclassifiable or attainment effective August 3, 2018, for the 2015 8-hour ozone standard.</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>Unclassifiable or attainment effective April 15, 2015, for the 2012 annual PM₂.₅ standard.</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>Unclassifiable or attainment effective December 13, 2009, for the 2006 24-hour PM₂.₅ standard.</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>Unclassifiable effective November 15, 1990.</td>
</tr>
<tr>
<td>NO₂</td>
<td>Unclassifiable or attainment effective January 29, 2012, for the 2010 NO₂ standard.</td>
</tr>
<tr>
<td>Pb</td>
<td>Unclassifiable or attainment effective December 31, 2011, for the 2008 lead standard.</td>
</tr>
</tbody>
</table>

(a) Ozone Standards

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 ozone. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOₓ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM₂.₅

Marshall County has been classified as attainment for PM₂.₅. Therefore, direct PM₂.₅, SO₂, and NOₓ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(e) Other Criteria Pollutants

Marshall County has been classified as attainment or unclassifiable in Indiana for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

### Fugitive Emissions

Since this type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

The fugitive emissions of hazardous air pollutants (HAP) are counted toward the determination of Part 70 Permit applicability and source status under Section 112 of the Clean Air Act (CAA).
The fugitive emissions of regulated air pollutants and hazardous air pollutants (HAP) are counted toward the determination of MSOP (326 IAC 2-6.1) applicability and source status under Section 112 of the Clean Air Act (CAA).

### Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of Utility Air Regulatory Group v. EPA, cause no. 12-1146, (available at [http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf](http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf)) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court’s decision. U.S. EPA’s guidance states that U.S. EPA will no longer require PSD or Title V permits for sources “previously classified as ‘Major’ based solely on greenhouse gas emissions.”

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

### Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

<table>
<thead>
<tr>
<th>Unrestricted Potential Emissions (ton/year)</th>
<th>PM(^1)</th>
<th>PM(_{10})(^1)</th>
<th>PM(_{2.5})(^{1,2})</th>
<th>SO(_2)</th>
<th>NO(_x)</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP(^3)</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE of Entire Source Excluding Fugitive Emissions*</td>
<td>5.23</td>
<td>5.49</td>
<td>5.49</td>
<td>0.04</td>
<td>6.91</td>
<td>36.70</td>
<td>5.91</td>
<td>7.99 (Toluene)</td>
<td>15.54</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Total PTE of Entire Source Including Source-Wide Fugitives*</td>
<td>13.29</td>
<td>7.57</td>
<td>5.73</td>
<td>0.04</td>
<td>6.91</td>
<td>36.70</td>
<td>5.91</td>
<td>7.99 (Toluene)</td>
<td>15.54</td>
</tr>
<tr>
<td>MSOP Thresholds</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>&lt; 100</td>
<td>&lt; 100</td>
<td>&lt; 25</td>
</tr>
</tbody>
</table>

\(^1\)Under the Part 70 Permit program (40 CFR 70), PM\(_{10}\) and PM\(_{2.5}\), not particulate matter (PM), are each considered as a “regulated air pollutant.”

\(^2\)PM\(_{2.5}\) listed is direct PM\(_{2.5}\).

\(^3\)Single highest source-wide HAP.

*Fugitive HAP emissions are always included in the source-wide emissions.

Appendix A of this TSD reflects the detailed unrestricted potential emissions of the source.

(a) The potential to emit as defined in 326 IAC 2-7-1(30)) of all regulated air pollutants is less than 100 tons per year. However, PM, PM\(_{10}\), PM\(_{2.5}\), and VOC is equal to or greater than twenty-five (25) tons per year. The source is not subject to the provisions of 326 IAC 2-7. The source will be issued an MSOP Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(30)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(30)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under...
Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7. The source will be issued an MSOP Renewal.

### Potential to Emit After Issuance

The table below summarizes the uncontrolled/unlimited potential to emit of the entire source. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)</th>
<th>PM¹</th>
<th>PM₁₀¹</th>
<th>PM₂.₅¹,²</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP³</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total PTE of Entire Source Excluding Fugitive Emissions</strong></td>
<td>5.23</td>
<td>5.49</td>
<td>5.49</td>
<td>0.04</td>
<td>6.91</td>
<td>36.70</td>
<td>5.91</td>
<td>7.99 (Toluene)</td>
<td>15.54</td>
</tr>
<tr>
<td><strong>Title V Major Source Thresholds</strong></td>
<td>--</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>10</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td><strong>Total PTE of Entire Source Including Source-Wide Fugitives</strong></td>
<td>15.01</td>
<td>9.30</td>
<td>7.45</td>
<td>0.04</td>
<td>6.91</td>
<td>36.70</td>
<td>5.91</td>
<td>7.99 (Toluene)</td>
<td>15.54</td>
</tr>
<tr>
<td><strong>MSOP Thresholds</strong></td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>&lt; 100</td>
<td>&lt; 10</td>
<td>&lt; 25</td>
<td></td>
</tr>
<tr>
<td><strong>PSD Major Source Thresholds</strong></td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

¹Under the Part 70 Permit program (40 CFR 70), PM₁₀ and PM₂.₅, not particulate matter (PM), are each considered as a "regulated air pollutant."

²PM₂.₅ listed is direct PM₂.₅.

³Single highest source-wide HAP

*Fugitive HAP emissions are always included in the source-wide emissions.

Potential to emit particulates accounts for integral controls.

Appendix A of this TSD reflects the detailed unlimited/uncontrolled emissions of the source.

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is not a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

### Federal Rule Applicability

Federal rule applicability for this source has been reviewed as follows:

**New Source Performance Standards (NSPS):**

(a) The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc and 326 IAC 12, are still not included in the permit for the natural gas-fired units, because they have maximum heat input capacities of less than ten (10) million British thermal units per hour (MMBtu/hr), each, and are not steam generating units as defined in §60.41c.
(b) The requirements of the New Source Performance Standard for Surface Coating of Metal Furniture, 40 CFR 60, Subpart EE and 326 IAC 12, are still not included in the permit for this source, because this source does not perform surface coating of metal furniture as defined in §60.310(a).

(c) The requirements of the New Source Performance Standard for Industrial Surface Coating: Large Appliances, 40 CFR 60, Subpart SS and 326 IAC 12, are still not included in the permit for this source, because this source does not apply surface coatings to large appliances as defined in §60.451.

(d) There are no other New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP):

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Plywood and Composite Wood Products, 40 CFR 63, Subpart DDDD are still not included in the permit for this source, since this source does not manufacture plywood and composite wood products as defined in §63.2292 and this source is not located at a major source of HAPs as defined in §63.2.

(f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63, Subpart MMMM and 326 IAC 20-80 are still not included in the permit for this source, since this source does not coat miscellaneous metal parts and products as defined in §63.3881 and this source is not located at a major source of HAPs as defined in §63.2.

(g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Plastic Parts and Products, 40 CFR 63, Subpart PPPP and 326 IAC 20-81 are still not included in the permit for this source, since this source does not coat plastic parts and products as defined in §63.4481 and this source is not located at a major source of HAPs as defined in §63.2.

(h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Wood Building Products, 40 CFR 63, Subpart QQQQ and 326 IAC 20-79 are still not included in the permit for this source, since this source does not coat wood building products as defined in §63.4781 and this source is not located at a major source of HAPs as defined in §63.2.

(i) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Metal Furniture, 40 CFR 63, Subpart RRRR and 326 IAC 20-78 are still not included in the permit for this source, since this source does not coat metal furniture as defined in §63.4981 and this source is not located at a major source of HAPs as defined in §63.2.

(j) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD and 326 IAC 20-95 are still not included in the permit for the natural gas-fired units, since these units are not industrial, commercial, or institutional boilers or process heaters as defined in §63.7575 and this source is not located at a major source of HAPs as defined in §63.2.

(k) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH are still not included in the permit for this source, since, although this source is an area source of HAPs, this source does not have paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl) in paint removal processes, the source does not have autobody refinishing operations, and the source does not spray apply coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or
cadmium (Cd), collectively referred to as the target HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.

(l) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63, Subpart JJJJJJJ are still not included in the permit for the natural gas-fired units, since, although this source is an area source of HAPs as defined in §63.2, each of the natural gas-fired combustion facilities is not considered an industrial, commercial, or institutional boiler as defined in §63.11237.

(m) There are no other National Emission Standards for Hazardous Air Pollutants under 40 CFR 63, 326 IAC 14 and 326 IAC 20 included in the permit.

**Compliance Assurance Monitoring (CAM):**

(n) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

### State Rule Applicability - Entire Source

State rule applicability for this source has been reviewed as follows:

#### 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Potential to Emit After Issuance section of this document.

#### 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The provisions of 326 IAC 2-4.1 apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41, after July 27, 1997, unless the major source has been specifically regulated under or exempted from regulation under a NESHAP that was issued pursuant to Section 112(d), 112(h), or 112(j) of the Clean Air Act (CAA) and incorporated under 40 CFR 63. On and after June 29, 1998, 326 IAC 2-4.1 is intended to implement the requirements of Section 112(g)(2)(B) of the Clean Air Act (CAA).

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

#### 326 IAC 2-6 (Emission Reporting)
This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, Clark, or Floyd County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

#### 326 IAC 5-1 (Opacity Limitations)
This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1)

#### 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

#### 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
This source is not subject to the requirements of 326 IAC 6-5, because the source has potential fugitive particulate emissions of less than twenty-five (25) tons per year.

#### 326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-1(a), this source (located in Marshall County) is not subject to the requirements of 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.
326 IAC 6.8 (Particulate Matter Limitations for Lake County)
Pursuant to 326 IAC 6.8-1-1(a), this source (located in Marshall County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

State Rule Applicability – Individual Facilities

Woodworking

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Since the following Facility(s) and/or Process(s) have potential emissions less than 0.551 pound per hour after consideration of the integral control device(s), pursuant to 326 IAC 6-3-1(b)(14), they are exempt from the requirements of 326 IAC 6-3-2.

However, since these facilities have potential emissions greater than 0.551 pound per hour prior to consideration of the integral control device(s), in order to assure the Facility(s) and/or Process(s) are not subject to the requirements of 326 IAC 6-3-2, the integral control device(s) shall be in operation and control emissions from the associated Facility(s) and/or Process(s) at all times the Facility(s) and/or Process(s) are in operation.

In order to assure the two (2) woodworking operations, identified as WW1 and WW2, are not subject to the requirements of 326 IAC 6-3-2, the integral baghouses, identified as P1 and P2, for particulate control shall be in operation and control emissions from the woodworking operations at all times the woodworking process is in operation.

All other miscellaneous woodworking units have PTE prior to integral controls of less than 0.551 lb/hr. Therefore, 326 IAC 6-3-2 does not apply.

Surface Coating

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(a), the requirements of 326 IAC 6-3-2 are applicable to the five (5) surface coating booths, identified as Booth 1 through Booth 5, since they are each manufacturing processes not exempted from this rule under 326 IAC 6-3-1(b) and are not subject to a particulate matter limitation that is as stringent as or more stringent than the particulate limitation established in this rule as specified in 326 IAC 6-3-1(c).

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.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(15), the two (2) countertop booths, identified as CB-1 and CB-2, and the Color Match booth, identified as CM-1, are not subject to the requirements of 326 IAC 6-3, since they each use less than five (5) gallons of coating per day.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Even though, the five (5) surface coating booths, identified as Booth 1 through Booth 5, the two (2) countertop booths, identified as CB-1 and CB-2, and the Color Match booth, identified as CM-1, were each constructed after January 1, 1980, they are not subject to the requirements of 326 IAC 8-1-6 because their unlimited VOC potential emissions are each less than twenty-five (25) tons per year.
326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations)
Pursuant to 326 8-2-9(a), this source is not subject to the requirements of 326 IAC 8-2-9 because it does not perform metal and plastic surface coating of the types listed in 326 IAC 8-2-9(a)(2). This source performs surface coating of wood kitchen cabinets and countertops.

326 IAC 8-2-10 (VOC Rules: Flat Wood Panels; Manufacturing Operations)
Pursuant to 326 IAC 8-2-10(a), the requirements of 326 IAC 8-2-10 are not applicable to this source, because it does not manufacture flat wood panels. This source performs surface coating of wood kitchen cabinets and countertops.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)
Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), when applying surface coatings to wood furniture and cabinets in the five (5) surface coating booths, identified as Booth 1 through Booth 5, the Permittee shall apply all coating material, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, using one (1) 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.

326 IAC 8-2-12 (VOC Rules: Wood Furniture and Cabinet Manufacturing)
This rule applies to facilities located in any county, constructed after July 1, 1990, that perform surface coating of wood furniture (or wood furniture components), including cabinets (kitchen, bath, and vanity), tables, beds, chairs, sofas (non-upholstered), art objects, and any other coated furnishings made of solid wood, wood composition, or simulated wood material and which have actual emissions of greater than fifteen (15) pounds of VOC per day before add-on controls.

Pursuant to 326 IAC 8-2-1(a)(4), the requirements of 326 IAC 8-2-12 are not applicable to the two (2) countertop booths, identified as CB-1 and CB-2, and the Color Match booth, identified as CM-1, since they were each not constructed before July 1, 1990 and emit less than fifteen (15) pounds of VOC per day before add-on controls.

326 IAC 8-11 (VOC Rules: Wood Furniture Coatings)
Pursuant to 326 IAC 8-11(1), this source is not subject to the requirements of 326 IAC 8-11, since the source is not located in Lake, Porter, Clark, or Floyd Counties. This source is located in Marshall County.

Natural Gas Combustion

326 IAC 6-2-1 (Particulate Emission Limitations for Sources of Indirect Heating)
Pursuant to 326 IAC 6-2-1(a), the requirements of 326 IAC 6-2 are not applicable to the four (4) furnaces, identified as AMU-1 through AMU-4, since each unit is not a source of indirect heat.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1.5(2), the four (4) furnaces, identified as AMU-1 through AMU-4, are each not subject to the requirements of 326 IAC 6-3, since they each are not a "manufacturing process" as defined in 326 IAC 6-3-1.5.
326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
These emission units are not subject to 326 IAC 7-1.1 because they each have a potential to emit (or limited potential to emit) sulfur dioxide (SO2) of less than 25 tons per year or 10 pounds per hour.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Even though, the four (4) furnaces, identified as AMU-1 through AMU-4, were constructed after January 1, 1980, they are not subject to the requirements of 326 IAC 8-1-6 because their unlimited VOC potential emissions are each less than twenty-five (25) tons per year.

326 IAC 9-1 (Carbon Monoxide Emission Limits)
The requirements of 326 IAC 9-1 do not apply to the source, because this source does not operate a catalyst regeneration petroleum cracking system or a petroleum fluid coker, grey iron cupola, blast furnace, basic oxygen steel furnace, or other ferrous metal smelting equipment.

326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)
The requirements of 326 IAC 10-3 do not apply to the four (4) furnaces, identified as AMU-1 through AMU-4, since these units are not blast furnace gas-fired boilers, a Portland cement kiln, or a facility specifically listed under 326 IAC 10-3-1(a)(2).

Adhesive Application

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(7), the adhesive application process is not subject to the requirements of 326 IAC 6-3, since it utilizes flow coating to apply adhesive.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Even though, this unit was constructed after January 1, 1980, it is not subject to the requirements of 326 IAC 8-1-6 because its unlimited VOC potential emissions are less than twenty-five (25) tons per year.

326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations)
Pursuant to 326 IAC 8-2-9(a) the unit is not subject to the requirements of 326 IAC 8-2-9 because it does not perform surface coating of miscellaneous metal and plastic parts. This unit coats wood cabinets and countertops.

326 IAC 8-2-12 (VOC Rules: Wood Furniture and Cabinet Manufacturing)
This rule applies to facilities located in any county, constructed after July 1, 1990, that perform surface coating of wood furniture (or wood furniture components), including cabinets (kitchen, bath, and vanity), tables, beds, chairs, sofas (non-upholstered), art objects, and any other coated furnishings made of solid wood, wood composition, or simulated wood material and which have actual emissions of greater than fifteen (15) pounds of VOC per day before add-on controls.

Pursuant to 326 IAC 8-2-1(a)(4), the requirements of 326 IAC 8-2-12 are not applicable to the adhesive application process, since it was not constructed before July 1, 1990 and emits less than fifteen (15) pounds of VOC per day before add-on controls.

326 IAC 8-11 (VOC Rules: Wood Furniture Coatings)
Pursuant to 326 IAC 8-11(1), adhesive application process is not subject to the requirements of 326 IAC 8-11, since the source is not located in Lake, Porter, Clark, or Floyd Counties. This source is located in Marshall County.

326 IAC 8-22 (VOC Rules: Miscellaneous Industrial Adhesives)
Pursuant to 326 IAC 8-22-1(a), the requirements of 326 IAC 8-22 are not applicable to the adhesive application process, since this source is not located in Lake or Porter Counties. This source is located in Marshall County.
Compliance Determination and Monitoring Requirements

(a) The Compliance Monitoring Requirements applicable to this source are as follows:

<table>
<thead>
<tr>
<th>Control Device</th>
<th>Type of Parametric Monitoring</th>
<th>Frequency</th>
<th>Range or Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Coating</td>
<td>Dry Filter Inspections</td>
<td>Daily</td>
<td>Verify the placement, integrity and particle loading of the filters</td>
</tr>
<tr>
<td>Dry Filters</td>
<td>Observations for stack overspray</td>
<td>Weekly</td>
<td>Verify if there is an overspray condition that should result in a response</td>
</tr>
<tr>
<td></td>
<td>Inspections for stack emissions and presence of overspray</td>
<td>Monthly</td>
<td>Verify if there is a noticeable change in overspray emissions or evidence of overspray</td>
</tr>
</tbody>
</table>

These monitoring conditions are necessary because the dry filters for the surface coating must operate properly to assure compliance with 326 IAC 6-3-2.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on March 3, 2021.

The operation of this stationary wood kitchen cabinet and countertop manufacturing facility shall be subject to the conditions of the attached proposed MSOP Renewal No. M099-43830-00070.

The staff recommends to the Commissioner that the MSOP Renewal be approved.

IDEM Contact

(a) If you have any questions regarding this permit, please contact L. David Cohen, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 233-9327 or (800) 451-6027, and ask for L. David Cohen or (317) 233-9327.

(b) A copy of the findings is available on the Internet at: [http://www.in.gov/ai/appfiles/idem-caats/](http://www.in.gov/ai/appfiles/idem-caats/)

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: [https://www.in.gov/idem/airpermit/2358.htm](https://www.in.gov/idem/airpermit/2358.htm); and the Citizens' Guide to IDEM on the Internet at: [https://www.in.gov/idem/6900.htm](https://www.in.gov/idem/6900.htm).
### Appendix A: Emission Calculations

#### PTE Summary

**Company Name:** Ayr Custom Cabinetry, Inc.  
**Source Address:** 1074 US Highway 6, Nappanee, Indiana 46550  
**Permit Number:** M099-43830-00070  
**Reviewer:** L. David Cohen

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5 *</th>
<th>SO₂</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs**</th>
<th>Worst Single HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two (2) Woodworking Areas (P1 and P2)</td>
<td>22.53</td>
<td>22.53</td>
<td>22.53</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Seven (7) Cabinet Surface Coating Booths</td>
<td>4.34</td>
<td>4.34</td>
<td>4.34</td>
<td>-</td>
<td>-</td>
<td>36.32</td>
<td>-</td>
<td>15.41</td>
<td>Toluene 7.99</td>
</tr>
<tr>
<td>Misc. Activities</td>
<td>0.31</td>
<td>0.18</td>
<td>0.18</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Natural Gas Combustion</td>
<td>0.13</td>
<td>0.53</td>
<td>0.53</td>
<td>0.04</td>
<td>6.91</td>
<td>0.38</td>
<td>5.81</td>
<td>0.13</td>
<td>Hexane 0.12</td>
</tr>
<tr>
<td>Water-Based Adhesive Application</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.12E-05</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Excluding Fugitives</strong></td>
<td>27.30</td>
<td>27.57</td>
<td>27.57</td>
<td>0.04</td>
<td>6.91</td>
<td>36.70</td>
<td>5.81</td>
<td>15.54</td>
<td>Toluene 7.99</td>
</tr>
</tbody>
</table>

#### Fugitive Emissions

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5 *</th>
<th>SO₂</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
<th>Worst Single HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paved Roads</td>
<td>0.99</td>
<td>0.20</td>
<td>0.05</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unpaved Roads</td>
<td>7.07</td>
<td>1.88</td>
<td>0.19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Including Fugitives</strong></td>
<td>13.29</td>
<td>7.57</td>
<td>5.73</td>
<td>0.04</td>
<td>6.91</td>
<td>36.70</td>
<td>5.81</td>
<td>15.54</td>
<td>Toluene 7.99</td>
</tr>
</tbody>
</table>

**Fugitive HAP emissions are always included in the source-wide emissions**

---

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5 *</th>
<th>SO₂</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
<th>Worst Single HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two (2) Woodworking Areas (P1 and P2)</td>
<td>0.45</td>
<td>0.45</td>
<td>0.45</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Seven (7) Cabinet Surface Coating Booths</td>
<td>4.34</td>
<td>4.34</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
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<td>0.53</td>
<td>0.53</td>
<td>0.04</td>
<td>6.91</td>
<td>0.38</td>
<td>5.81</td>
<td>0.13</td>
<td>Hexane 0.12</td>
</tr>
<tr>
<td>Water-Based Adhesive Application</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.12E-05</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Excluding Fugitives</strong></td>
<td>5.23</td>
<td>5.49</td>
<td>5.49</td>
<td>0.04</td>
<td>6.91</td>
<td>36.70</td>
<td>5.81</td>
<td>15.54</td>
<td>Toluene 7.99</td>
</tr>
</tbody>
</table>

**Fugitive HAP emissions are always included in the source-wide emissions**

---

* PM2.5 listed is direct PM2.5

**Fugitive HAP emissions are always included in the source-wide emissions**
Appendix A: Emission Calculations
Woodworking Operations

Company Name: Ayr Custom Cabinetry, Inc.
Source Address: 1074 US Highway 6, Nappanee, Indiana 46550
Permit Number: M099-43830-00070
Reviewer: L. David Cohen

<table>
<thead>
<tr>
<th>Unit ID</th>
<th>Saw Dust Collected Per Unit (lb/unit)</th>
<th>Maximum Capacity (unit/hr)</th>
<th>Control Efficiency</th>
<th>PTE of PM/PM10/PM2.5 Before Integral Controls (lb/hr)</th>
<th>PTE of PM/PM10/PM2.5 Before Integral Controls (tons/yr)</th>
<th>PTE of PM/PM10/PM2.5 After Integral Controls (lb/hr)</th>
<th>PTE of PM/PM10/PM2.5 After Integral Controls (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>0.504</td>
<td>7.5</td>
<td>98%</td>
<td>3.86</td>
<td>16.89</td>
<td>0.08</td>
<td>0.34</td>
</tr>
<tr>
<td>P2</td>
<td>0.504</td>
<td>2.5</td>
<td>98%</td>
<td>1.29</td>
<td>5.63</td>
<td>0.03</td>
<td>0.11</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td></td>
<td>5.14</td>
<td>22.53</td>
<td>0.10</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Methodology
PTE of PM/PM10/PM2.5 Before Integral Controls (lb/hr) = Saw Dust Collected Per Unit (lb/unit) * Maximum Capacity (unit/hr) / Control Efficiency
PTE of PM/PM10/PM2.5 Before Integral Controls (tons/yr) = PTE of PM/PM10/PM2.5 Before Integral Controls (lb/hr) * 8760 hrs/yr / 2000 lb/ton
PTE of PM/PM10/PM2.5 After Integral Controls (lb/hr) = PTE of PM/PM10/PM2.5 Before Integral Controls (lb/hr) * (1 - Control Efficiency)
PTE of PM/PM10/PM2.5 After Integral Controls (tons/yr) = PTE of PM/PM10/PM2.5 Before Integral Controls (tons/yr) * (1 - Control Efficiency)
## Appendix A: Emissions Calculations
### Miscellaneous Woodworking Equipment

**Company Name:** Ayr Custom Cabinetry, Inc.  
**Source Address:** 1074 US Highway 6, Nappanee, Indiana 46550  
**Permit Number:** M099-43830-00070  
**Reviewer:** L. David Cohen

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Maximum Throughput (lbs/hr)</th>
<th>Uncontrolled Emission Factor (lb/ton)</th>
<th>Potential Uncontrolled Emissions (lb/hr)</th>
<th>Potential Uncontrolled Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miscellaneous Woodworking Equipment</td>
<td>400</td>
<td>PM 0.35</td>
<td>PM10/PM2.5 0.20</td>
<td>PM 0.07</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Methodology**

The emission factors used in the above table are from AP-42, 4th Edition, September 1985, Table 10.3-1. Maximum Throughput (lbs/hr) provided by the source. Potential Uncontrolled PM/PM10/PM2.5 (lb/hr) = Throughput (lbs/hr) * Emission Factor (lb/ton). Potential Uncontrolled PM/PM10/PM2.5 (tons/year) = Potential Uncontrolled PM/PM10/PM2.5 (lb/hr) * 8760 hr/year * 1 ton/2000 lbs.
### Methodology

Exempt compounds include all compounds specifically exempted from the definition of volatile organic compounds (VOC) under 40 CFR 51.100(s).

- Weight % VOC = [(Weight % Volatile (water, VOC, and exempt Compounds)] / [(Weight % water and exempt Compounds)]
- Maximum Material Usage (gallons) = [(Maximum Capacity (units/hour)) * (24 hours/day)]
- Pounds of VOC per gallon coating (less water and exempt compounds) = [(Density (lbs/gal)) * (Weight % Volatile (water, VOC, and exempt Compounds))]
- PTE of VOC (lbs/hour) = [(Maximum Material Usage (gallons)) * (Pounds of VOC per gallon coating (less water and exempt compounds))]
- PTE of VOC (tons/year) = [(PTE of VOC (lbs/hour)) * (8760 hours/year)]
- Controlled PTE of VOC (tons/year) = [(Uncontrolled PTE of VOC (tons/year)) * (1 - Transfer Efficiency)]

### Transfer Efficiency

- Control Efficiency = (95.0%)
- Total Controlled Potential to Emit (PTE) (tons/year) = [(Total for 7 booths) * (Control Efficiency)]

### Material

<table>
<thead>
<tr>
<th>Operation</th>
<th>Material</th>
<th>Density (lbs/gal)</th>
<th>Weight % Volatile (water, VOC, and exempt Compounds)</th>
<th>Weight % water and exempt compounds</th>
<th>Weight % VOC</th>
<th>Volume % Solids</th>
<th>Volume Material Usage (gallons)</th>
<th>Maximum Capacity (units/hour)</th>
<th>Uncontrolled PTE of VOC (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coating Booths</td>
<td>T84C00017 Wash Thinner</td>
<td>12.60</td>
<td>30.69%</td>
<td>0.00%</td>
<td>30.69%</td>
<td>0.00%</td>
<td>41.50%</td>
<td>0.0461</td>
<td>2000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operation</th>
<th>Material</th>
<th>Density (lbs/gal)</th>
<th>Weight % Volatile (water, VOC, and exempt Compounds)</th>
<th>Weight % water and exempt compounds</th>
<th>Weight % VOC</th>
<th>Volume % Solids</th>
<th>Volume Material Usage (gallons)</th>
<th>Maximum Capacity (units/hour)</th>
<th>Uncontrolled PTE of VOC (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coating Booths</td>
<td>As-Applied Stain</td>
<td>7.25</td>
<td>50.03%</td>
<td>0.00%</td>
<td>50.03%</td>
<td>0.00%</td>
<td>51.50%</td>
<td>0.0461</td>
<td>2000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operation</th>
<th>Material</th>
<th>Density (lbs/gal)</th>
<th>Weight % Volatile (water, VOC, and exempt Compounds)</th>
<th>Weight % water and exempt compounds</th>
<th>Weight % VOC</th>
<th>Volume % Solids</th>
<th>Volume Material Usage (gallons)</th>
<th>Maximum Capacity (units/hour)</th>
<th>Uncontrolled PTE of VOC (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counterflow Booths</td>
<td>Glue A</td>
<td>9.90</td>
<td>45.62%</td>
<td>0.00%</td>
<td>45.62%</td>
<td>0.00%</td>
<td>53.56%</td>
<td>0.0461</td>
<td>2000</td>
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</table>

<table>
<thead>
<tr>
<th>Operation</th>
<th>Material</th>
<th>Density (lbs/gal)</th>
<th>Weight % Volatile (water, VOC, and exempt Compounds)</th>
<th>Weight % water and exempt compounds</th>
<th>Weight % VOC</th>
<th>Volume % Solids</th>
<th>Volume Material Usage (gallons)</th>
<th>Maximum Capacity (units/hour)</th>
<th>Uncontrolled PTE of VOC (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color Match Booth C5-1</td>
<td>T84C00017 Wash Thinner</td>
<td>12.60</td>
<td>30.69%</td>
<td>0.00%</td>
<td>30.69%</td>
<td>0.00%</td>
<td>51.50%</td>
<td>0.0461</td>
<td>2000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operation</th>
<th>Material</th>
<th>Density (lbs/gal)</th>
<th>Weight % Volatile (water, VOC, and exempt Compounds)</th>
<th>Weight % water and exempt compounds</th>
<th>Weight % VOC</th>
<th>Volume % Solids</th>
<th>Volume Material Usage (gallons)</th>
<th>Maximum Capacity (units/hour)</th>
<th>Uncontrolled PTE of VOC (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counterflow Booths</td>
<td>As-Applied Stain</td>
<td>7.25</td>
<td>50.03%</td>
<td>0.00%</td>
<td>50.03%</td>
<td>0.00%</td>
<td>51.50%</td>
<td>0.0461</td>
<td>2000</td>
</tr>
</tbody>
</table>
### Appendix A: Emissions Calculations

#### Hazardous Air Pollutants (HAPs) From Surface Coating Operations

**Company Name:** Ayr Custom Cabinetry, Inc.  
**Source Address:** 1074 US Highway 6, Nappanee, Indiana 46550  
**Permit Number:** M099-43830-00070  
**Reviewer:** L. David Cohen

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Density (lbs/gal)</th>
<th>Maximum Material Usage (gal/unit)</th>
<th>Maximum Capacity (units/hour)</th>
<th>Weight % Ethylbenzene</th>
<th>Weight % Methyl Methacrylate</th>
<th>Weight % Methanol</th>
<th>PTE of HAP (tons/year)</th>
<th>PTE of Total HAPs (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUSION Stain Base</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEMCOLOR Burnt Umber</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As-Applied Stain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HC Aristovar Ultrasand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HC Aristocrat Catalyst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As-Applied Sealer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HC Aristovar Plus 70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HC Aristocrat Catalyst</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As-Applied Top Coat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T84C00017 Wash Thinner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corian Part A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corian Part B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As-Applied Glue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adhesive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Methodology**

\[
\text{PTE of HAP (tons/year)} = \left[\text{Density (lbs/gal)}\right] \times \left[\text{Maximum Material Usage (gal/unit)}\right] \times \left[\text{Maximum Capacity (units/hour)}\right] \times \left[\text{Weight % HAP}\right] \times 8760 \text{ hours/year} \times \left[\frac{1 \text{ ton}}{2000 \text{ lbs}}\right] \\
\text{PTE of Total HAPs (tons/year)} = \sum \text{(PTE of Each Single HAP (tons/year))}
\]

**Operation**

<table>
<thead>
<tr>
<th>Countertop Coating Booths</th>
<th>Color Match Booth CM-1</th>
<th>Color Match Booth CM-2</th>
<th>Color Match Booth CM-3</th>
<th>Color Match Booth CM-4</th>
<th>Color Match Booth CM-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two (2)</td>
<td>Five (5)</td>
<td>Five (5)</td>
<td>Five (5)</td>
<td>Five (5)</td>
<td>Five (5)</td>
</tr>
</tbody>
</table>

Hazardous air pollutant (HAP) is defined by Section 112(b) of the Clean Air Act.
## Appendix A: Emissions Calculations

### Daily Volume-Weighted Average

**Company Name:** Ayr Custom Cabinetry, Inc.

**Source Address:** 1074 US Highway 6, Nappanee, Indiana 46550

**Permit Number:** M099-43830-00070

**Reviewer:** L. David Cohen

<table>
<thead>
<tr>
<th>Material</th>
<th>Gal of Mat. (gal/unit)</th>
<th>Maximum (unit/hour)</th>
<th>VOC Content of Coating (lbs VOC/gal of coating less water and exempt compounds as applied)</th>
<th>Coating Usage Rate (Σ U)</th>
<th>Volume Weighted Average (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Coating (PB1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part A, Primer</td>
<td>2.0</td>
<td>0.13</td>
<td>5.0</td>
<td>31.20</td>
<td>6.24</td>
</tr>
<tr>
<td>Part B, Primer Activator</td>
<td>2.0</td>
<td>4.13</td>
<td>3.5</td>
<td>693.84</td>
<td>198.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>725.04</td>
<td>204.48</td>
</tr>
</tbody>
</table>

### Methodology

**Volume Weighted Average Equation:**

\[
A = \left[ \frac{\sum (C \times U)}{\sum U} \right]
\]

Where:

- \( A \) = the volume weighted average in pounds VOC per gallon less water and exempt compounds as applied;
- \( C \) = the VOC content of the coating in pounds VOC per gallon less water and exempt compounds as applied; and
- \( U \) = the usage rate of the coating in gallons per day.
Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Ayr Custom Cabinetry, Inc.
Source Address: 1074 US Highway 6, Nappanee, Indiana 46550
Permit Number: M099-43830-00070
Reviewer: L. David Cohen

<table>
<thead>
<tr>
<th>Unit</th>
<th>mmBtu</th>
<th>HHV</th>
<th>Potential Throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat Input Capacity AMU-1</td>
<td>5.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMU-2</td>
<td>5.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMU-3</td>
<td>3.00</td>
<td>mmscf</td>
<td>MMCF/yr</td>
</tr>
<tr>
<td>AMU-4</td>
<td>1.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/MMCF</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM*</td>
<td>1.9</td>
<td>0.13</td>
</tr>
<tr>
<td>PM10*</td>
<td>7.6</td>
<td>0.53</td>
</tr>
<tr>
<td>direct PM2.5*</td>
<td>7.6</td>
<td>0.53</td>
</tr>
<tr>
<td>SO2</td>
<td>0.6</td>
<td>0.04</td>
</tr>
<tr>
<td>NOx</td>
<td>100</td>
<td>6.91</td>
</tr>
<tr>
<td>VOC</td>
<td>5.5</td>
<td>0.38</td>
</tr>
<tr>
<td>CO</td>
<td>84</td>
<td>5.81</td>
</tr>
</tbody>
</table>

**see below

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 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
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
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Hazardous Air Pollutants (HAPs)

<table>
<thead>
<tr>
<th>HAPs - Organics</th>
<th>Benzene</th>
<th>Dichlorobenzene</th>
<th>Formaldehyde</th>
<th>Hexane</th>
<th>Toluene</th>
<th>Total - Organics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in lb/MMcf</td>
<td>2.1E-03</td>
<td>1.2E-03</td>
<td>7.5E-02</td>
<td>1.8E+00</td>
<td>3.4E-03</td>
<td></td>
</tr>
<tr>
<td>Potential Emission in tons/yr</td>
<td>1.5E-04</td>
<td>8.3E-05</td>
<td>5.2E-03</td>
<td>0.12</td>
<td>2.4E-04</td>
<td>0.13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HAPs - Metals</th>
<th>Lead</th>
<th>Cadmium</th>
<th>Chromium</th>
<th>Manganese</th>
<th>Nickel</th>
<th>Total - Metals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in lb/MMcf</td>
<td>5.0E-04</td>
<td>1.1E-03</td>
<td>1.4E-03</td>
<td>3.8E-04</td>
<td>2.1E-03</td>
<td></td>
</tr>
<tr>
<td>Potential Emission in tons/yr</td>
<td>3.5E-05</td>
<td>7.6E-05</td>
<td>9.7E-05</td>
<td>2.6E-05</td>
<td>1.5E-04</td>
<td>3.8E-04</td>
</tr>
</tbody>
</table>

Methodology is the same as above.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
## Appendix A: Emissions Calculations
### VOC and Particulate
#### From Surface Coating Operations
##### Water Based Adhesives Operation

- **Company Name:** Ayr Custom Cabinetry, Inc.
- **Source Address:** 1074 US Highway 6, Nappanee, Indiana 46550
- **Permit Number:** M099-43830-00070
- **Reviewer:** L. David Cohen

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (Lb/Gal)</th>
<th>Weight % Water</th>
<th>Weight % Organics</th>
<th>Volume % Non-Volatiles (solids)</th>
<th>Volatile (H2O &amp; Organics)</th>
<th>Weight %</th>
<th>Volume % Water</th>
<th>Gal of Mat. (gal/unit)</th>
<th>Maximum (unit/hour)</th>
<th>Pounds VOC per gallon of coating less water</th>
<th>Pounds VOC per gallon of coating</th>
<th>Potential VOC pounds per hour</th>
<th>Potential VOC pounds per day</th>
<th>Potential VOC tons per year</th>
<th>Potential (ton/yr)</th>
<th>lb VOC/gal solids</th>
<th>Transfer Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water based adhesives</td>
<td>9.51</td>
<td>52.0%</td>
<td>52.0%</td>
<td>0.040%</td>
<td>95.0%</td>
<td>5.00%</td>
<td>0.010</td>
<td>0.067</td>
<td>0.076</td>
<td>0.004</td>
<td>0.0000003</td>
<td>0.00001</td>
<td>0.0001</td>
<td>0.00</td>
<td>0.076</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

### METHODOLOGY

- **Pounds of VOC per Gallon Coating less Water** = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
- **Pounds of VOC per Gallon Coating** = (Density (lb/gal) * Weight % Organics)
- **Potential VOC Pounds per Hour** = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
- **Potential VOC Pounds per Day** = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
- **Potential VOC Tons per Year** = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hrs/yr) * (1 ton/2000 lbs)
- **Particulate Potential Tons per Year** = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
- **Pounds VOC per Gallon of Solids** = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
- **Total** = Worst Coating + Sum of all solvents used
- **Potential to emit HAPs for Adhesive Application** is reflected in Surface Coating HAPs sheet
Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Ayr Custom Cabinetry, Inc.
Source Address: 1074 US Highway 6, Nappanee, Indiana 46550
Permit Number: M099-43830-00070
Reviewer: L. David Cohen

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Information (provided by source)

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum number of vehicles per day</th>
<th>Maximum trips per day (trip/day)</th>
<th>Maximum Weight Loaded (tons/trip)</th>
<th>Total Weight driven per day (ton/day)</th>
<th>Maximum one-way distance (feet/trip)</th>
<th>Maximum one-way distance (mi/trip)</th>
<th>Maximum one-way miles (miles/day)</th>
<th>Maximum one-way miles (miles/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant)</td>
<td>1.0</td>
<td>48.0</td>
<td>48.0</td>
<td>1920.0</td>
<td>80</td>
<td>0.015</td>
<td>0.7</td>
<td>265.5</td>
</tr>
<tr>
<td>Vehicle (leaving plant)</td>
<td>1.0</td>
<td>48.0</td>
<td>48.0</td>
<td>1920.0</td>
<td>80</td>
<td>0.015</td>
<td>0.7</td>
<td>265.5</td>
</tr>
</tbody>
</table>

Totals 96.0 3840.0 1.5 530.9

Average Vehicle Weight Per Trip = 40.0 tons/trip
Average Miles Per Trip = 0.02 miles/trip

Unmitigated Emission Factor, \( E_f = \frac{k \cdot (sL)^{0.91} \cdot (W)^{1.02}}{VMT} \) (Equation 1 from AP-42 13.2.1)

\[ k = 0.011, \quad W = 40.0, \quad sL = 9.7 \]

PM PM10 PM2.5

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)

Mitigated Emission Factor, \( E_{ext} = E_f \cdot \frac{1 - (p/N)}{4} \) (Equation 2 from AP-42 13.2.1)

\[ p = 125 \text{ days of rain greater than or equal to } 0.01 \text{ inches} \]
\[ N = 365 \text{ days per year} \]

Mitigated Emission Factor, \( E_{ext} = \frac{E_f \cdot [1 - (p/N)]}{4} \)

<table>
<thead>
<tr>
<th>Process</th>
<th>Unmitigated PTE of PM (tons/yr)</th>
<th>Unmitigated PTE of PM10 (tons/yr)</th>
<th>Unmitigated PTE of PM2.5 (tons/yr)</th>
<th>Mitigated PTE of PM (tons/yr)</th>
<th>Mitigated PTE of PM10 (tons/yr)</th>
<th>Mitigated PTE of PM2.5 (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant)</td>
<td>0.50</td>
<td>0.10</td>
<td>0.02</td>
<td>0.45</td>
<td>0.09</td>
<td>0.02</td>
</tr>
<tr>
<td>Vehicle (leaving plant)</td>
<td>0.50</td>
<td>0.10</td>
<td>0.02</td>
<td>0.45</td>
<td>0.09</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Totals 0.99 0.20 0.05 0.91 0.18 0.04

Methodology

\[ \text{Total Weight driven per day (ton/day)} = \text{[Maximum Weight Loaded (tons/trip)]} \cdot \text{[Maximum trips per day (trip/day)]} \]
\[ \text{Maximum one-way distance (mi/trip)} = \text{[Maximum one-way distance (feet/trip)]} / 5280 \text{ ft/mile} \]
\[ \text{Maximum one-way miles (miles/day)} = \text{[Maximum trips per year (trip/day)]} \cdot \text{[Maximum one-way distance (mi/trip)]} \]
\[ \text{Average Vehicle Weight Per Trip (tons/trip)} = \frac{\text{SUM}[\text{Total Weight driven per day (ton/day)}]}{\text{SUM}[\text{Maximum trips per day (trip/day)}]} \]
\[ \text{Average Miles Per Trip (miles/trip)} = \frac{\text{SUM}[\text{Maximum one-way miles (miles/day)}]}{\text{SUM}[\text{Maximum trips per day (trip/day)}]} \]
\[ \text{Unmitigated PTE (tons/yr)} = \text{[Maximum one-way miles (miles/yr)]} \cdot \text{[Unmitigated Emission Factor (lb/mile)]} \cdot \text{[ton2000 lbs]} \]
\[ \text{Mitigated PTE (tons/yr)} = \text{[Maximum one-way miles (miles/yr)]} \cdot \text{[Mitigated Emission Factor (lb/mile)]} \cdot \text{[ton2000 lbs]} \]
\[ \text{Controlled PTE (tons/yr)} = \text{[Mitigated PTE (tons/yr)]} \cdot [1 - \text{Dust Control Efficiency}] \]

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit
### Appendix A: Emission Calculations

#### Fugitive Dust Emissions - Unpaved Roads

**Company Name:** Ayr Custom Cabinetry, Inc.  
**Source Address:** 1074 US Highway 6, Nappanee, Indiana 46550  
**Permit Number:** M099-43830-00070  
**Reviewer:** L. David Cohen

#### Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

#### Vehicle Information (provided by source)

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum number of vehicles</th>
<th>Number of one-way trips per day per vehicle</th>
<th>Maximum trips per day (trip/day)</th>
<th>Maximum Weight Loaded (tons/trip)</th>
<th>Total Weight driven per day (ton/day)</th>
<th>Maximum one-way distance (mi/trip)</th>
<th>Maximum one-way miles (miles/day)</th>
<th>Maximum one-way miles (miles/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant)</td>
<td>1.0</td>
<td>48.0</td>
<td>48.0</td>
<td>40.0</td>
<td>1920.0</td>
<td>0.042</td>
<td>2.0</td>
<td>730.6</td>
</tr>
<tr>
<td>Vehicle (leaving plant)</td>
<td>1.0</td>
<td>48.0</td>
<td>48.0</td>
<td>40.0</td>
<td>1920.0</td>
<td>0.042</td>
<td>2.0</td>
<td>730.6</td>
</tr>
</tbody>
</table>

**Totals**

|                           | 96.0                      | 3840.0                                    | 4.0                             | 1461.2                            |

**Average Vehicle Weight Per Trip =** 46.6 tons/trip  
**Average Miles Per Trip =** 0.04 miles/trip

**Unmitigated Emission Factor, \( E_f \) = k \* \( \left(\frac{s}{12}\right)^a \) \* \( \frac{W}{3} \) \^{b} \]**  
Equation 1a from AP-42 13.2.2

- \( k = 4.9 \text{ lb/mi} \)  
- \( s = 6.0 \% \)  
- \( a = 0.7 \)  
- \( W = 40.0 \text{ tons} \)  
- \( b = 0.45 \)  

**Unmitigated Emission Factor, \( E_f \) = 9.68 lb/mile**  
**Mitigated Emission Factor, \( E_{ext} \) = 6.36 lb/mile**

**Mitigated Emission Factor, \( E_{ext} \) = \( E \) \* \( \frac{365 - P}{365} \)**  
Equation 2 from AP-42 13.2.2

- \( P = 125 \)  

**Process**

<table>
<thead>
<tr>
<th></th>
<th>Unmitigated PTE of PM (tons/yr)</th>
<th>Unmitigated PTE of PM10 (tons/yr)</th>
<th>Unmitigated PTE of PM2.5 (tons/yr)</th>
<th>Mitigated PTE of PM (tons/yr)</th>
<th>Mitigated PTE of PM10 (tons/yr)</th>
<th>Mitigated PTE of PM2.5 (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant)</td>
<td>3.53</td>
<td>0.94</td>
<td>0.09</td>
<td>2.32</td>
<td>0.62</td>
<td>0.06</td>
</tr>
<tr>
<td>Vehicle (leaving plant)</td>
<td>3.53</td>
<td>0.94</td>
<td>0.09</td>
<td>2.32</td>
<td>0.62</td>
<td>0.06</td>
</tr>
</tbody>
</table>

**Totals**

|                                               | 7.07                           | 1.88                              | 0.19                              | 4.65                          | 1.24                            | 0.12                              |

#### Methodology

- **Total Weight driven per day (ton/day)** = [Maximum Weight Loaded (tons/trip)] \* [Maximum trips per day (trip/day)]  
- **Maximum one-way distance (mi/trip)** = [Maximum one-way distance (feet/trip)] / 5280  
- **Average Vehicle Weight Per Trip (ton/trip)** = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]

**Abbreviations**

- **PM** = Particulate Matter  
- **PM10** = Particulate Matter (<10 um)  
- **PM2.5** = Particulate Matter (<2.5 um)  
- **PTE** = Potential to Emit  
- \( (\cdot) \) = (Mitigated Emission Factor (lb/mile)) \* (ton/2000 lbs)
John Helmuth  
Ayr Custom Cabinetry, Inc.  
1074 US Hwy 6  
Nappanee, IN 46550  

May 11, 2021  

Re: Public Notice  
Ayr Custom Cabinetry, Inc.  
Permit Level: MSOP Renewal  
Permit Number: 099-43830-00070  

Dear Mr. Helmuth:

Enclosed is a copy of the preliminary findings for your draft air permit, including the draft permit, Technical Support Document, emission calculations, and the Notice of 30-Day Period for Public Comment.

Our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person. The Notice of 30-Day Period for Public Comment (without supporting documents) has also been sent to the OAQ Permits Branch Interested Parties List and, if applicable, your Consultant/Agent and/or Responsible Official/Authorized Individual.

The Public Notice period will begin the date the Notice is published on the IDEM Official Public Notice website. Publication has been requested and is expected within 2-3 business days. You may check the exact Public Notice begins and ends date here: https://www.in.gov/idem/public-notices/.

Please note that as of April 17, 2019, IDEM is no longer required to publish the notice in a newspaper.

OAQ has submitted the draft permit package to the Bremen Public Library, 304 North Jackson Street in Bremen, IN. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to L. David Cohen, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-9327 or dial (317) 233-9327.

Sincerely,

Theresa Weaver  
Permits Branch  
Office of Air Quality  

PN Applicant Cover Letter 8/10/2020
May 11, 2021

To: Bremen Public Library

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: Important Information to Display Regarding a Public Notice for an Air Permit

Applicant Name: Ayr Custom Cabinetry, Inc.
Permit Number: 099-43830-00070

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. Please make this information readily available until you receive a copy of the final package.

If you have any questions concerning this public review process, please contact Joanne Smiddle-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library updated 4/2019
Notice of Public Comment

May 11, 2021
Ayr Custom Cabinetry, Inc.
099-43830-00070

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has posted on IDEM’s Public Notice website at https://www.in.gov/idem/public-notices/.

The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana’s Air Permitting Program.

Please Note: If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Joanne Smiddie-Brush with the Air Permits Administration Section at 1-800-451-6027, ext. 3-0185 or via e-mail at JBRUSH@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.

Enclosure
PN AAA Cover Letter 2/28/2020
### Mail Code 61-53

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<th>Type of Mail:</th>
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<tr>
<td>Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204</td>
<td>CERTIFICATE OF MAILING ONLY</td>
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<td>John Helmuth Ayr Custom Cabinetry Inc 1074 US Hwy 6 Nappanee IN 46550 (Source CAATS)</td>
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<td>Nappanee City Council and Mayors Office P.O. Box 29 Nappanee IN 46550 (Local Official)</td>
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<td>Marshall County Commissioners 112 West Jefferson Street Plymouth IN 46563 (Local Official)</td>
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<td>Ms. Julie Grzesiak 139 N. Michigan St. Argos IN 46501 (Affected Party)</td>
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<td>James Heim J.C. Heim Consulting L.L.C. 57901 Blue Heron Drive Goshen IN 46528 (Consultant)</td>
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<td>Christina Seiler The Rochester Sentinel PO Box 260 Rochester IN 46975 (Affected Party)</td>
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<td>Mr. Roger Schneider The Goshen News 114 S. Main St Goshen IN 46528 (Affected Party)</td>
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**Total number of pieces Listed by Sender**: 13

**Total number of Pieces Received at Post Office**: 13

**Postmaster, Per (Name of Receiving employee)**: 

The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50,000 per occurrence. The maximum indemnity payable on Express mail merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See **Domestic Mail Manual R900, S913, and S921** for limitations of coverage on insured and COD mail. See **International Mail Manual** for limitations of coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.