ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CLASS I PERMIT

COMPANY:	*American Woodmark Corporation*
FACILITY:	*American Woodmark Corporation-Kingman*
PERMIT #:	*42868*
DATE ISSUED:	August 8, 2008
EXPIRY DATE:	August 8, 2013

SUMMARY

This Title V renewal permit for Permit No. 1001540 is issued to American Woodmark Corporation (AWC), the Permittee, for operation of a wood cabinet manufacturing facility in Kingman, Mohave County, Arizona.

The facility is classified as a Class I, Major Source pursuant to A.A.C. R18-2-101.64. The potential emission rate of volatile organic compounds (VOC) is greater than 100 tons per year and the potential emission rates of individual and combined hazardous air pollutants (HAPs) are greater than 10 and 25 tons per year, respectively. The total allowable VOC emissions from the facility are limited by enforceable permit conditions to below 250 tons per year. Thus the facility is not a major source as defined under Arizona Administrative Code (A.A.C.) R18-2-401, for the purposes of the Prevention of Significant Deterioration program. The facility is subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) Subpart JJ - Wood Furniture Manufacturing Operations.

This permit is issued in accordance with Title 49, Chapter 3 of the Arizona Revised Statutes. All definitions, terms, and conditions used in this permit conform to those in the Arizona Administrative Code (A.A.C.) R18-2-101 et. seq. and Title 40, Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the A.A.C. All material permit conditions have been identified within the permit by underline and italics. All terms and conditions in this permit are enforceable by the Administrator of the United States Environmental Protection Agency (U.S. EPA).

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ATTACHMENT "A": GENERAL PROVISIONS

Air Quality Control Permit No. 42868
For
American Woodmark, Inc.

I. PERMIT EXPIRATION AND RENEWAL

[ARS § 49-426.F, A.A.C. R18-2-304.C.2, and -306.A.1]

A. This permit is valid for a period of five years from the date of issuance.

B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months, prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS

[A.A.C. R18-2-306.A.8.a and b]

A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the Arizona air quality statutes and air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.

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

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE

[A.A.C. R18-2-306.A.8.c, -321.A.1, and -321.A.2]

A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

The permit shall be reopened and revised under any of the following circumstances

1. Additional applicable requirements under the Clean Air Act become applicable to the Class I source. Such a reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless an application for renewal has been submitted pursuant to A.A.C. R18-2-322.B. Any permit revision required pursuant to this subparagraph shall comply with the provisions in A.A.C. R18-2-322 for permit renewal and shall reset the five-year permit term.

2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.

3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.

B. Proceedings to reopen and reissue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under Condition III.B.1 above, affect only those parts of the permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Condition III.B.1 above shall not result in a resetting of the five-year permit term.

IV. POSTING OF PERMIT

[A.A.C. R18-2-315]

A. The Permittee shall post this permit or a certificate of permit issuance where the facility is located in such a manner as to be clearly visible and accessible. All equipment covered by this permit shall be clearly marked with one of the following:

1. Current permit number; or

2. Serial number or other equipment ID number that is also listed in the permit to identify that piece of equipment.

B. A copy of the complete permit shall be kept on site.

V. FEE PAYMENT

[A.A.C. R18-2-306.A.9 and -326]

The Permittee shall pay fees to the Director pursuant to ARS § 49-426(E) and A.A.C. R18-2-326.

VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE

[A.A.C. R18-2-327.A and B]

A. The Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31st or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.

B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

VII. COMPLIANCE CERTIFICATION

[A.A.C. R18-2-309.2.a, -309.2.c-d, and -309.5.d]

A. The Permittee shall submit a compliance certification to the Director semiannually, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than May 15th, and shall report the compliance status of the source during the period between October 1st of the previous year and March 31st of the current year. The second certification shall be submitted no later than November 15th, and shall report the compliance status of the source during the period between April 1st and September 30th of the current year.

The compliance certifications shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;

2. Identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period,

3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in Condition VII.A.2 above. The certifications shall identify each deviation and take it into account for consideration in the compliance certification;

4. For emission units subject to 40 CFR Part 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR Part 64 occurred;

5. All instances of deviations from permit requirements reported pursuant to Condition XII.B of this Attachment; and

6. Other facts the Director may require to determine the compliance status of the source.

B. A copy of all compliance certifications shall also be submitted to the EPA Administrator.

C. If any outstanding compliance schedule exists, a progress report shall be submitted with the semi-annual compliance certifications required in Condition VII.A above.

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS [A.A.C. R18-2-304.H]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IX. INSPECTION AND ENTRY [A.A.C. R18-2-309.4]

Upon presentation of proper credentials, the Permittee shall allow the Director or the authorized representative of the Director to:

A. Enter upon the Permittee's premises where a source is located, emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;

B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

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

D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

E. Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD [A.A.C. R18-2-304.C]

If this source becomes subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

XI. ACCIDENTAL RELEASE PROGRAM [40 CFR Part 68]

If this source becomes subject to the provisions of 40 CFR Part 68, then the Permittee shall comply with these provisions according to the time line specified in 40 CFR Part 68.

XII. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting [A.A.C. R18-2-310.01.A and -310.01.B]

1. Excess emissions shall be reported as follows:

   a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:

      (1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from Condition XII.A.1.b below.

      (2) Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XII.A.1.a.(1) above.

   b. The report shall contain the following information:

      (1) Identity of each stack or other emission point where the excess emissions occurred;

      (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;

      (3) Date, time and duration, or expected duration, of the excess emissions;

      (4) Identity of the equipment from which the excess emissions emanated;

      (5) Nature and cause of such emissions;

      (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions; and

      (7) Steps taken to limit the excess emissions. If the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.

2. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period, or changes in the nature of the emissions as originally reported, shall require additional notification pursuant to Condition XII.A.1 above. [A.A.C. R18-2-310.01.C]

B. Permit Deviations Reporting [A.A.C. R18-2-306.A.5.b]

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to an emergency or within two working days of the time when the owner or operator first learned of the occurrence of a deviation from a permit requirement.

C. Emergency Provision [A.A.C. R18-2-306.E]

1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if Condition XII.C.3 is met.

3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;

   b. The permitted facility was being properly operated at the time;

   c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and

   d. The Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

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

5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

D. Compliance Schedule [ARS § 49-426.I.5]

For any excess emission or permit deviation that cannot be corrected with 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

E. Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown

[A.A.C. R18-2-310]

1. Applicability

This rule establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

a. Promulgated pursuant to Sections 111 or 112 of the Act;

b. Promulgated pursuant to Titles IV or VI of the Clean Air Act;

c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. EPA;

d. Contained in A.A.C. R18-2-715.F; or

e. Included in a permit to meet the requirements of A.A.C. R18-2-406.A.5.

2. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. When emissions in excess of an applicable emission limitation are due to a malfunction, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

a. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the Permittee;

b. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

c. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the Permittee satisfactorily demonstrated that the measures were impracticable;

d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

g. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the

Arizona Administrative Code that could be attributed to the emitting source;

h. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;

i. All emissions monitoring systems were kept in operation if at all practicable; and

j. The Permittee's actions in response to the excess emissions were documented by contemporaneous records

3. Affirmative Defense for Startup and Shutdown

a. Except as provided in Condition XII.E.3.b below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. When emissions in excess of an applicable emission limitation are due to startup and shutdown, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

(1) The excess emissions could not have been prevented through careful and prudent planning and design;

(2) If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;

(3) The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

(4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

(5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

(6) During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;

(7) All emissions monitoring systems were kept in operation if at all practicable; and

(8) Contemporaneous records documented the Permittee's actions in response to the excess emissions.

b. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to Condition XII.E.2 above.

4. Affirmative Defense for Malfunctions during Scheduled Maintenance

If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to Condition XII.E.2 above.

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XII.E.2 or XII.E.3 above, the Permittee shall demonstrate, through submission of the data and information required by Condition XII.E and A.A.C. R18-2-310.01, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of the excess emissions.

XIII. RECORD KEEPING REQUIREMENTS [A.A.C. R18-2-306.A.4]

A. The Permittee shall keep records of all required monitoring information including, but not limited to, the following:

1. The date, place as defined in the permit, and time of sampling or measurements;

2. The date(s) analyses were performed;

3. The name of the company or entity that performed the analyses;

4. A description of the analytical techniques or methods used;

5. The results of such analyses; and

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

B. The Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

C. All required records shall be maintained either in an unchangeable electronic format or in a handwritten logbook utilizing indelible ink.

XIV. REPORTING REQUIREMENTS [A.A.C. R18-2-306.A.5.a]

The Permittee shall submit the following reports:

A. Compliance certifications in accordance with Section VII of Attachment "A".

B. Excess emission; permit deviation, and emergency reports in accordance with Section XII of Attachment "A".

C. Other reports required by any condition of Attachment "B".

XV. DUTY TO PROVIDE INFORMATION [A.A.C. R18-2-304.G and -306.A.8.e]

A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For

information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.

B. If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

XVI. PERMIT AMENDMENT OR REVISION

[A.A.C. R18-2-318, -319, and -320]

The Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVII, as follows:

A. Administrative Permit Amendment (A.A.C. R18-2-318);

B. Minor Permit Revision (A.A.C. R18-2-319); and

C. Significant Permit Revision (A.A.C. R18-2-320)

The applicability and requirements for such action are defined in the above referenced regulations.

XVII. FACILITY CHANGE WITHOUT A PERMIT REVISION

[A.A.C. R18-2-306.A.4 and -317]

A. The Permittee may make changes at the permitted source without a permit revision if all of the following apply:

1. The changes are not modifications under any provision of Title I of the Act or under ARS § 49-401.01(19);

2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions;

3. The changes do not violate any applicable requirements or trigger any additional applicable requirements;

4. The changes satisfy all requirements for a minor permit revision under A.A.C.–R18-2-319.A; and

5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements.

B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of Conditions XVII.A and XVII.C of this Attachment.

C. For each change under Conditions XVII.A and XVII.B above, a written notice by certified mail or hand delivery shall be received by the Director and the Administrator a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change, but must be provided as far in advance of the change, as possible or, if advance notification is not practicable, as soon after the change as possible.

D. Each notification shall include:

1. When the proposed change will occur;

2. A description of the change;

3. Any change in emissions of regulated air pollutants; and

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

E. The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section, other than implementation of an alternate to Conditions XVII.A and XVII.B above.

F. Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as provided under A.A.C. R18-2-306.A.11 shall not require any prior notice under this Section.

G. Notwithstanding any other part of this Section, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under this Section over the term of the permit, do not satisfy Condition XVII.A above.

XVIII. TESTING REQUIREMENTS

[A.A.C. R18-2-312]

A. The Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.

B. Operational Conditions during Testing

Tests shall be conducted during operation at the maximum possible capacity of each unit under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

C. Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.

D. Test Plan

At least 14 calendar days prior to performing a test, the Permittee shall submit a test plan to the Director in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

1. Test duration;

2. Test location(s);

3. Test method(s); and

4. Source operation and other parameters that may affect test results.

E. Stack Sampling Facilities

The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;

2. Safe sampling platform(s);

3. Safe access to sampling platform(s); and

4. Utilities for sampling and testing equipment.

F. Interpretation of Final Results

Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control, compliance may, upon the Director's approval, be determined using the arithmetic mean of the results of the other two runs. If the Director or the Director's designee is present, tests may only be stopped with the Director's or such designee's approval. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes: forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation, which demonstrates good cause, must be submitted.

G. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

XIX. PROPERTY RIGHTS

[A.A.C. R18-2-306.A.8.d]

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

XX. SEVERABILITY CLAUSE

[A.A.C. R18-2-306.A.7]

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

XXI. PERMIT SHIELD

[A.A.C. R18-2-325]

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements identified in the portions of this permit subtitled "Permit Shield". The permit shield shall not apply to minor revisions pursuant to Condition XVI.B of this Attachment and any facility changes without a permit revision pursuant to Section XVII of this Attachment.

XXII. PROTECTION OF STRATOSPHERIC OZONE [40 CFR Part 82]

If this source becomes subject to the provisions of 40 CFR Part 82, then the Permittee shall comply with these provisions accordingly.

ATTACHMENT "B": SPECIFIC CONDITIONS

Air Quality Control Permit No. 42868

For

American Woodmark, Inc.

I. FACILITY WIDE REQUIREMENTS

A. General Requirements

1. The Permittee shall have on-site or on-call a person that is certified in EPA Reference Method 9 for the observation and evaluation of visible emissions. [A.A.C. R18-2-306.A.3.c]

2. The Permittee shall operate all equipment identified in Attachment "D" in accordance with vendor-supplied operations and maintenance instructions. If vendor-supplied operations and maintenance instructions are not available, the Permittee shall prepare an Operation and Maintenance Plan, which provides adequate information to properly operate and maintain the these equipment in good working order. In the absence of vendor-supplied operations and maintenance instructions, the Permittee shall operate the equipment in accordance with the Operation and Maintenance Plan. [A.A.C. R18-2-306.A.2]

3. The Permittee shall maintain, on-site, records of the manufacturer's specifications or Operation and Maintenance Plan for minimizing emissions for all process and control equipment listed in Attachment "D". [A.A.C. R18-2-306.A.4]

4. The Permittee shall submit reports of all monitoring activities required in Attachment "B" along with the compliance certifications required by Section VII of Attachment "A." [A.A.C. R18-2-306.A.5]

5. The Permittee shall keep a log of all emission-related maintenance activities performed at the facility. These records shall be made available to ADEQ upon request. [A.A.C. R18-2-306.A.3.c]

B. General Requirements for Compliance Assurance Monitoring (CAM)

The following requirements shall be applicable to any equipment that is subject to CAM requirements:

1. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emission points are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR 64.7.(c)]

2. Response to excursions

   a. Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emission point (including the control device and associated capture system)

to its normal or usual manner of operation as expeditiously as practicable, but no later than 24 hours following detection of an excursion, in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction, and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action, or any necessary follow-up actions to return operations to within the indicator range, designated condition, or below applicable emission limitation or standard, as applicable.

[40 CFR 64.7.(d)(1), Conditions III.C.7 and 17 of Attachment B of Permit No. 1001540]

b. 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, monitoring results, review of operation, and maintenance procedures and records, and inspection of the control device, associated capture system, and process. [40 CFR 64.7.(d)(2)]

3. If the Permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the Department, and if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conduction monitoring and collecting data, or the monitoring of additional parameters. [40 CFR 64.7(e)]

4. Excursions shall be reported as required by Condition VII.A.4 of Attachment "A" of this permit. The report shall include, at a minimum, the following:

[A.A.C. R18-2-309(2)(c)(iii)]

a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursion or exceedances, as applicable, and the corrective actions taken; and [40 CFR 64.9(a) (2)(i)]

b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable).

[40 CFR 64.9(a) (2)(ii)]

II. FINISHING OPERATIONS

A. Applicability

This Section is applicable to all equipment in Finishing Line 1, Expedite Line 3, Hybrid Line 4, test booth, and pump house.

B. Operational Limitation

1. *The Permittee shall not operate the finishing material test booth for more than 876 hours in any rolling 12-month period.*

[A.A.C. R18-2-306.A.2, A.A.C R18-2-331.3.a, and Condition No. IV.A of Permit No. 1001540 as revised by Permit Revision No. 28507]

[Material Permit Conditions indicated by italics and underline]

2. The Permittee shall maintain record of daily, monthly and 12-month rolling totals for the operating hours of the test booth. [A.A.C. R18-2-306.A.3.c]

C. Particulate Matter and Opacity

1. Emission Limitation/Standard

The Permittee shall not cause, allow or permit visible emissions from painting operations in excess of 20% opacity, as measured by EPA Reference Method 9. [A.A.C. R18-2-702.B]

2. Permit Shield

Compliance with the Conditions of this Part shall be deemed compliance with A.A.C.R18-2-702.B. [A.A.C. R18-2-325]

D. Volatile Organic Compounds (VOCs)

1. Emission Limitations/Standards

a. *Total VOC emissions from controlled finishing operations (finishing lines 1 and 4) shall not exceed 167.0 tons per year, calculated on a rolling 12-month basis.*
[A.A.C. R18-2-306.01, R18-2-306.02 and R18-2-331.3.a]
[Material Permit Conditions indicated by italics and underline]

b. *Total VOC emissions from manual finishing operations (finishing line 3) shall not exceed 59.6 tons per year, calculated on rolling 12-month basis.*
[A.A.C. R18-2-306.01, R18-2-306.02 and R18-2-331.3.a]
[Material Permit Conditions indicated by italics and underline]

c. The Permittee shall not conduct any spray painting operations without minimizing organic solvent emissions. Such operations, except architectural coating, shall be conducted in an enclosed area equipped with controls containing no less than 96% of the overspray. [A.A.C. R18-2-727.A]

d. The Permittee shall not:

i. Employ, apply, evaporate or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or

ii. Thin or dilute any architectural coating with a photochemically reactive solvent.

[A.A.C. R18-2-727.B]

e. A photochemically reactive solvent shall be defined as any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in the subsections below, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

i. A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.

ii. A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.

iii. A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

[A.A.C.R18-2-727.C]

2. Air Pollution Control Requirements

a. *The Permittee shall operate* and maintain *a VOC capture system and a regenerative thermal oxidizer (RTO-1) to capture and control VOC emissions from the following finishing operation emission units in Finishing Lines 1 and 4. The VOC capture system and RTO-1 shall be operated at all times when VOC containing materials are being processed in the controlled finishing lines.*

Finishing Line 1:

Automatic Spray Booths: M4a, M4b, M13a, M13b, M16a, M16b, M26a, M26b, M33a, M33b, M40a, M40b, M50a and M50b.
Stain Wiping Machines: M5a, M5b, M17a and M17b.
Curing Ovens: M7, M14, M21, M28a, M28b, M35a, M35b, M42a, M42b, M52a and M52b.

Finishing Line 4:

Automatic Spray Booths: H29a, H29b, H41a, H41b, H48a and H48b.
Reverse Roll Coater: H31 and H33.
Stain Wiping Machines:H30a
Wiping Conveyor: H32a, H32b, H34a and H34b
Curing Oven: H36, H43a, H43b, H50a and H50b.

[A.A.C. R18-2-306.01.A, R18-2-306.02.C and R18-2-331.A.3.b]
[Material Permit Conditions indicated by italics and underline]

b. *Each spray booth shall be equipped with an enclosure and dry filter or water wash system to contain no less than 96% of the overspray.*

[A.A.C. R18-2-306.01.A and A.A.C. R18-2-331.A.3.e]
[Material Permit Conditions indicated by italics and underline]

c. *Each controlled finishing line emission unit bypass damper shall be maintained in closed position such that exhaust gases are routed to the regenerative thermal oxidizer (RTO-1) during all times that VOC containing materials/products are being processed in that emission unit or the upstream VOC module spray booth. A VOC module is defined as a discrete series of finishing equipment beginning with coating application unit(s) [e.g., spray booth, roll coater, and/or wiping machines/conveyors] and followed by associated downstream curing oven(s).*

[A.A.C. R18-2-306.A2 and R18-2-331.A.3.e]
[Material Permit Conditions indicated by italics and underline]

d. *The VOC capture system shall be operated to achieve a minimum capture efficiency of 90 percent by weight for Finishing Lines 1 and 4.*

[A.A.C. R18-2-306.01.A and R18-2-331.A.3.e]
[Material Permit Conditions indicated by italics and underline]

e. *The regenerative thermal oxidizer (RTO-1) shall be operated to achieve a minimum VOC destruction efficiency of 95 percent by weight.*

[A.A.C. R18-2-306.01.A and R18-2-331.A.3.e]
[Material Permit Conditions indicated by italics and underline]

3. Monitoring, Record keeping and Reporting Requirements

a. The Permittee shall perform a daily inspection to verify the integrity and particle loading of the spray booth dry filters, and proper operation of the water wash system. [A.A.C. R18-2-306.A.3.c]

b. The Permittee shall perform a weekly inspection of the spray booths to monitor overspray. If overspray discharge is detected, corrective action shall be taken as soon as practicable but no later than 4 hours following the discovery. [A.A.C. R18-2-306.A.3.c]

c. The Permittee shall maintain records of spray booth and control system inspections, filter replacements and corrective actions taken, if any. These records shall be readily available to ADEQ upon request. [A.A.C. R18-2-306.A.4]

d. The Permittee shall maintain daily and monthly accounting of all finishing materials purchased and used in finishing operations. This accounting shall contain a breakdown of finishing material along with VOC and volatile organic hazardous air pollutant (VHAP) content for each finishing material (including coatings, thinners, contact adhesives, and strippable spray booth coatings) as applied in each finishing line in accordance with Condition II.E.6.b of this Attachment. Supporting records used to develop the accounting, including purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount of each finishing material used, shall be maintained on site and shall be readily available to ADEQ upon request. [A.A.C. R18-2-306.A.3. c, A.A.C. R18-2-306.A.4]

e. The Permittee shall maintain daily and monthly records of all VOC containing waste materials disposed as well as corresponding VOC content data for each disposed waste material (expressed as a weight percentage). Waste material VOC content values may be obtained from the appropriate generic waste profile maintained on site. For the purpose of this Condition, "disposed" shall mean containerized and shipped off site under manifest. [A.A.C. R18-2-306.A.4]

f. The Permittee shall use the monthly usage records for each line from Condition II.D.3.d and e of this Attachment, and VOC capture efficiency & regenerative thermal oxidizer (RTO-1) destruction efficiency for Lines 1 and 4 based on the most recent performance test in accordance with Condition II.D.5 of this Attachment to calculate total monthly VOC emissions for each finishing line as per calculation procedures contained in Attachment "C". [A.A.C. R18-2-306.A.3.c]

g. The Permittee shall record the individual month and twelve-month rolling total VOC emissions from all finishing lines each month. [A.A.C. R18-2-306.A.3.c]

h. The Permittee shall notify the Director in writing if total of VOC emissions from Finishing Lines 1, 3 and 4 exceeds 18.9 tons in any calendar month. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the emission limit specified in Conditions II.D.1.a and b of this Attachment. [A.A.C. R18-2-306.A.3.c]

i. Each individual month and twelve month rolling total VOC emissions in the reporting period shall be included in the semiannual compliance certification required by Condition VII of Attachment "A". [A.A.C. R18-2-306.A.4]

j. Bypass Damper Operation

i. *The Permittee shall observe and record the position of the directional indicator of each VOC collection system bypass damper at least once per operating day for Lines 1 and 4 and at the commencement of each VOC module operation.* [A.A.C. R18-2-306.A.3.c and A.A.C R18-2-331.A.3.c]
[Material Permit Conditions indicated by italics and underline]

ii. The Permittee shall perform an annual functional inspection of each VOC collection system bypass damper for the criteria listed below. The Permittee shall maintain a log of all bypass damper functional inspections on site readily available to ADEQ upon request. [A.A.C. R18-2-306.A.3.c]

(1) Function and range of motion of damper;

(2) Condition of the damper closure seal; and

(3) Integrity of the indicator.

iii. The Permittee shall take corrective action within four hours of any observation indicating a bypass damper in the "open" position during the respective VOC module operation. [A.A.C. R18-2-306.A.3.c]

k. Regenerative Thermal Oxidizer (RTO) Inspection

i. The Permittee shall perform a functional inspection of the RTO at least once per operating day for Lines 1 and/or 4. The functional inspection shall include observation of the combustion chamber temperature monitoring system output and verification of normal operation of the RTO and all blowers and dampers in accordance with the manufacturer's specifications. Each functional inspection shall be recorded in a log. These logs shall be readily available to ADEQ upon request
[A.A.C. R18-2-306.A.3.c]

ii. The Permittee shall perform an inspection and maintenance of the RTO burner at least once per year. A record of each annual RTO burner inspection and all RTO maintenance shall be maintained on site readily available to ADEQ upon request. [A.A.C. R18-2-306.A.3.c]

iii. The Permittee shall take corrective action following the discovery of any abnormal operation of the regenerative thermal oxidizer (RTO-1) or combustion chamber temperature monitoring system as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, but no later than 24 hours following detection of abnormal operation. [A.A.C. R18-2-306.A.3.c]

4. Compliance Assurance Monitoring for VOCs

a. Indicators

i. The Permittee shall monitor static pressure on each Finishing Line 1 and 4 spray booth and at the common exhaust duct at the inlet to the regenerative thermal oxidizer. [40 CFR 64.6(c)(1)(i)]

ii. Permittee shall monitor the temperature of the RTO combustion chamber. [40 CFR 64.6(c)(1)(i)]

b. Monitoring Approach

i. Static Pressure

(1) *The Permittee shall* operate, *and maintain a continuous static pressure monitoring device on each VOC module in Finishing Lines 1 and 4 and at the common exhaust duct at the inlet to the regenerative thermal oxidizer (RTO-1).*

[A.A.C. R18-2-331.A.3.c and 40 CFR 64.6(c)(1)(i) and (ii)]
[Material Permit Conditions indicated by italics and underline]

(2) The Permittee shall observe and record the readings from each VOC module enclosure static pressure monitoring system at least once per controlled finishing line operating day. The Permittee shall maintain a log of all static pressure readings on site readily available to ADEQ upon request. [40 CFR 64.6(c)(1)(i)]

(3) The static pressure at RTO inlet shall be recorded continuously on a digital recorder. The record of the pressure monitoring shall be maintained on site and shall be readily available to ADEQ upon request. [40 CFR 64.6(c)(1)(i)]

ii. Regenerative Thermal Oxidizer Temperature

The Permittee shall operate, *and maintain a continuous temperature monitoring system on the regenerative thermal oxidizer (RTO-1).* The Permittee shall continuously monitor and record the temperature of the RTO combustion chamber inlet and outlet. The output of the temperature monitoring system shall be continuously recorded on a digital recorder and maintained on site readily available to ADEQ upon request.

[A.A.C. R18-2-331.A.3.c and 40 CFR 64.6(c)(1)(i) and (ii)]
[Material Permit Conditions indicated by italics and underline]

c. Excursion Determination

i. Static Pressure

(1) Each positive static pressure reading at any VOC capture system monitoring shall constitute an excursion. [40 CFR 64.6(c)(2)]

(2) Each period longer than 15 consecutive minutes during which the regenerative thermal oxidizer inlet static pressure falls below -3.5 inch water column shall constitute an excursion. [40 CFR 64.6(c)(2)]

ii. Regenerative Thermal Oxidizer Temperature

Each period longer than 15 consecutive minutes during which the regenerative thermal oxidizer (RTO-1) combustion chamber outlet temperature falls below 1425 degree Fahrenheit shall constitute an excursion. [40 CFR 64.6(c)(2)]

d. In addition to the above, the Permittee shall comply with all the requirements under Condition I.B of this Attachment as applicable.

5. Testing Requirements [A.A.C. R18-2-311 and A.A.C. R18-2-312]

a. The Permittee shall perform an annual compliance test for the destruction efficiency of the Finishing Lines 1 and 4 VOC control system.

b. VOC control system capture efficiency tests shall be conducted in the first and fourth year of the permit term. This test will be performed concurrent with the VOC control system destruction efficiency test required under Condition II.D.5.a above. If at any time, the 12-month rolling total of VOC emission rate for Finishing Lines 1 and 4 exceeds 80 percent of the VOC emission limit contained in Condition II.D.1.a and b of this Attachment, the Permittee shall perform annual compliance tests for the capture efficiency of Finishing Lines 1 and 4 VOC control system for the rest of the permit term

c. Each performance test required under Conditions II.D.5.a and II.D.5.b above shall include, at a minimum, the following elements:

i. Preparation and submittal to the Director, a site specific test plan that satisfies the requirements of 40 CFR 63.7(c)(2). The test plan shall be submitted no later than 60 days prior to the proposed start date of the performance test, and is subject to approval by the Director prior to scheduling the proposed tests.

ii. Notification to the Director at least 60 days prior to the proposed date for commencing the performance test.

iii. Testing facilities that meet the specifications in 40 CFR 63.7(d).

iv. Testing which follows accepted reference methods set forth in applicable appendices of 40 CFR 51, 60, or 63, as specified in the facility test plan.

v. Three complete test runs, of not less than one hour each, for each test condition or location specified in the Test Plan. The efficiency results or other measurements from the tests shall be considered to be the mean average of three runs, unless provisions in 40 CFR 63.7 (e)(3) must be applied.

vi. Alternative methods or deviations from accepted US EPA Reference Methods shall be subject to approval by the Director, according to 40 CFR 63.7(f).

d. The capture efficiency of the VOC collection system for Finishing Lines 1 and 4 shall be determined using the applicable procedures and EPA test methods in Condition II.E.5.d of this Attachment and 40 CFR Part 51, Appendix M - Methods 204 and 204A through 204F. Alternate procedures or methods may be approved in advance by the Director as part of the site specific test plan.

e. The VOC control efficiency of the regenerative thermal oxidizer (RTO-1) shall be determined using the applicable procedures and U.S. EPA test methods in Condition II.E.5.d of this Attachment. Alternate procedures or methods may be approved in advance by the Director as part of the site specific test plan. The control efficiency is defined as:

Control Efficiency = [upstream VOC (lb/hr) - downstream VOC (lb/hr)] / [upstream VOC (lb/hr)]

f. The product of the capture and control efficiency determined in accordance with Conditions d and e above shall define the overall control efficiency (R) of the each VOC capture and control system.

g. During each performance test, the Permittee shall record the readings from each VOC module enclosure static pressure monitoring system and the RTO inlet pressure.

h. A comprehensive written report on the results of each required emissions test shall be signed by the person(s) responsible for the test and the responsible official and submitted to the Department within 30 days following completion of the test(s).

E. Hazardous Air Pollutants (HAP): National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart JJ - Wood Furniture Manufacturing Operations.

1. General Provisions

The Permittee shall comply with the requirements of subpart A of this Part (General Provisions), according to the applicability of subpart A to such sources, as identified in Table 1 of 40 CFR Part 63 Subpart JJ.

2. Emission Limitations

a. The Permittee shall limit volatile hazardous air pollutant (VHAP) emissions from finishing operations by meeting the following emission limitations for new sources using any of the compliance methods in Condition II.E.4.a of this Attachment.

i. Achieve a weighted average VHAP content of 0.80 lb VHAP/lb solids across all coatings as applied,

ii. Or, use compliant finishing materials with maximum VHAP content, as applied, as per following:

(1) Stains - Maximum VHAP content of 1.0 pound VHAP per pound solid, as applied.

(2) Wash coats, sealers, topcoats, basecoats, and enamels - Maximum VHAP content of 0.8 pound VHAP per pound solids, as applied.

(3) Thinners used for on-site formulation of washcoats, basecoats, and enamels shall not exceed three percent (3.0%) maximum VHAP content by weight. All other thinners shall not exceed ten percent (10%) maximum VHAP content by weight;

iii. Or, use a control device to limit emissions to 0.8 pound VHAP per pound solids;

iv. Or, use a combination of i, ii and iii above.

[40 CFR 63.802(b)(1)]

b. The Permittee shall limit VHAP emissions from contact adhesives by achieving a VHAP limit for contact adhesives, excluding aerosol adhesives and excluding contact adhesives applied to nonporous substrates, of no greater than 0.2 lb VHAP/lb solids, as applied, using either of the compliance methods in Condition II.E.4.b of this Attachment. [40 CFR 63.802(b)(2)]

c. The Permittee shall limit HAP emissions from strippable spray booth coatings by using coatings that contain no more than 0.8 lb VOC/lb solids, as applied. [40 CFR 63.802(b)(3)]

3. Work Practice Standards

a. Work Practice Implementation Plan [40 CFR 63.803(a)]

i. The Permittee shall maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture operation manufacturing operation and addresses each of the work practice standards presented in Conditions II.E.3.b through l of this Attachment.

ii. The written work practice implementation plan shall be available for inspection by ADEQ upon request. If the Director determines that the work practice implementation plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Director may require the affected source to modify the plan.

iii. The inspection and maintenance plan required by Conditions II.E.3.c of this Attachment and the formulation assessment plan for finishing operations required by Conditions II.E.3.l of this attachment are also reviewable by the Director.

b. Operator Training Course [40 CFR 63.803(b)]

The Permittee shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment, or implementation of the requirements of this subpart. All new personnel shall be trained upon hiring. All personnel shall be given refresher training annually. The Permittee shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:

i. A list of all current personnel, by name and job description, those are required to be trained;

ii. An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;

iii. Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and

iv. A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.

c. Inspection and Maintenance Plan [40 CFR 63.803(c)]

The Permittee shall maintain with the work practice implementation plan, a written leak inspection and maintenance plan that specifies:

i. A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;

ii. An inspection schedule;

iii. Methods for documenting the date and results of each inspection and any repairs that were made;

iv. The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:

(1) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and

(2) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.

d. Cleaning and Washoff Solvent Accounting System [40 CFR 63.803(d)]

The Permittee shall develop an organic HAP solvent accounting form to record:

i. The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in §63.801 of 40 CFR Part 63 Subpart JJ;

ii. The number of pieces washed off, and the reason for the washoff; and

iii. The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.

e. Chemical Composition of Cleaning and Washoff Solvents [40 CFR 63.803(e)]

The Permittee shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of Subpart JJ of 40 CFR Part 63, in concentrations subject to MSDS reporting as required by OSHA.

f. Spray Booth Cleaning [40 CFR 63.803(f)]

The Permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the

spray booth coating or other protective material used to cover the booth is being replaced, the affected source shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.

g. Storage Requirements [40 CFR 63.803(g)]

The Permittee shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.

h. Application Equipment Requirements [40 CFR 63.803(h)]

The Permittee shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:

i. To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;

ii. For touchup and repair under the following conditions:

(1) The touchup and repair occurs after completion of the finishing operation; or

(2) The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons.

iii. When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;

iv. When emissions from the finishing application station are directed to a control device;

v. The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or

vi. The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology.

The Permittee shall demonstrate technical or economic infeasibility by submitting to the Director videotape, a technical report, or other documentation that supports the affected source's claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the Permittee's claim of technical or economic infeasibility:

(1) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or

(2) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.

i. Line Cleaning [40 CFR 63.803(i)]

The Permittee shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.

j. Gun cleaning [40 CFR 63.803(j)]

The Permittee shall collect all organic HAP solvent used to clean spray guns into a normally closed container.

k. Washoff operations [40 CFR 63.803(k)]

The Permittee shall control emissions from washoff operations by:

i. Using normally closed tanks for washoff; and

ii. Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.

l. Formulation assessment plan for finishing operations [40 CFR 63.803(l)]

The Permittee shall maintain with the work practice implementation plan the following formulation assessment plan:

i. If, the Permittee uses a VHAP of potential concern listed in Table 6 to Subpart JJ of 40 CFR Part 63, then the baseline level shall be established as the *de minimis* level provided in that same table for that chemical. The Permittee shall track the annual usage of each VHAP of potential concern identified in this paragraph that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the *de minimis* level listed in Table 6 to Subpart JJ of 40 CFR Part 63 for that chemical, then the affected source shall provide an explanation to the Director that documents the reason for the exceedance of the *de minimis* level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:

(1) Usage of the VHAP is below the *de minimis* level presented in Table 6 to Subpart JJ of 40 CFR Part 63 for that VHAP (sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the procedures in Conditions II.E.5.d or e of this Attachment.)

(2) The Permittee is in compliance with its State's air toxic regulations or guidelines for the VHAP; or

(3) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 kg VOC/kg solids (1.0 lb VOC/lb solids), as applied.

ii. If none of the above explanations are the reason for the increase, the Permittee shall confer with the Director to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the Director and the Permittee. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the Permittee shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.

4. Compliance Procedures and Monitoring Requirements.

a. The Permittee shall comply with Condition II.E.2.a of this Attachment by one of the following methods:

i. Calculate the average VHAP content across all finishing materials used at the facility using Equation 1, and maintain a value of E no greater than 0.8;

$$E=(M_{c1}C_{c1}+M_{c2}C_{c2}+ * * * +M_{cn}C_{cn}+S_1W_1+S_2W_2+ * * * S_nW_n)/(M_{c1}+M_{c2}+ * * * +M_{cn})$$ Equation 1

Where:

C_c = the VHAP concentration of a finishing material (c), in kg VHAP/kg solids (lb VHAP / lb solids) as applied;

E = the emission limit achieved by an emission point or a set of emission points, in kg VHAP / kg solids (lb VHAP / lb solids);

M = the mass of solids in finishing material used monthly, kg solids/month (lb solids/month);

S = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials; and

W = the amount of solvent, in kilograms (pounds), added to finishing materials during the monthly averaging period.

[40 CFR 63.804(d)(1)]

ii. Use compliant finishing materials according to the following criteria:

(1) Demonstrate that each sealer and topcoat has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, each stain has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight;

(2) Demonstrate that each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning

another finishing material, has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight; and

(3) Demonstrate that each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent HAP by weight.

[40 CFR 63.804(d)(2)]

iii. Use a control system with an overall control efficiency (R) such that the value of E_{ac} in Equation 2 is no greater than 0.8.

$$R=[(E_{bc}-E_{ac})/E_{bc}](100) \qquad \text{Equation 2}$$

E_{bc} = the emission by an emission point or a set of emission points before control, in kg VHAP / kg solids (lb VHAP / lb solids)

E_{ac} = the emission by an emission point or a set of emission points after control, in kg VHAP / kg solids (lb VHAP / lb solids)

The value of E_{bc} in Equation 2 shall be calculated using Equation 1; or [40 CFR 63.804(d)(3)]

iv. Use any combination of an averaging approach, as described in Condition II.E.4.a.i above, compliant finishing materials, as described in Condition II.E.4.a.ii above, and a control system, as described in Condition II.E.4.a.iii above. [40 CFR 63.804(d)(4)]

b. The Permittee shall comply with Condition II.E.2.b of this Attachment by one of the following methods:

i. by using compliant contact adhesives with a VHAP content no greater than 0.2 lb VHAP/lb solids, as applied. [40 CFR 63.804(e)(1)]

ii. by using a control system with an overall control efficiency (R) such that the value of G_{ac} in Equation 3 is no greater than 0.2. [40 CFR 63.804(e)(2)]

$$R=[(G_{bc}-G_{ac})/G_{bc}]\ (100) \qquad \text{Equation 3}$$

G_{bc}= the VHAP content of a contact adhesive before control, in kg VHAP/kg solids (lb VHAP/lb solids), as applied.

G_{ac}= the VHAP content of a contact adhesive after control, in kg VHAP/kg solids (lb VHAP/lb solids), as applied.

c. Continuous compliance demonstrations.

i. If the Permittee chooses to comply with the Condition II.E.2.a of this Attachment through the procedures established in Condition II.E.4.a.i, the Permittee shall demonstrate continuous compliance by submitting the

results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report required by Condition II.E.7.b of this Attachment. The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater than 0.8. The Permittee is in violation of the standard if E is greater than 0.8. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the Permittee can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period. [40 CFR 63.804(g)(1)]

ii. If the Permittee chooses to comply with the Condition II.E.2.a of this Attachment through the procedures established in Condition II.E.4.a.ii, the Permittee shall demonstrate continuous compliance by using compliant coatings and thinners, maintaining records that demonstrate the coatings and thinners are compliant, and submitting a compliance certification with the semiannual report required by Condition II.E.7.b of this Attachment. The compliance certification shall state that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used. [40 CFR 63.804(g)(2)]

iii. If the Permittee chooses to comply with the Condition II.E.2.a of this Attachment through the procedures established in Condition II.E.4.a.ii and is applying coatings using continuous coaters, the Permittee shall demonstrate continuous compliance by following procedures: [40 CFR 63.804(g)(3)]

(1) Using compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, using compliant thinners, and submitting a compliance certification with the semiannual report required by Condition II.E.7.b of this Attachment. The compliance certification shall state that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. The Permittee is in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.

(2) Using compliant coatings, as determined by the VHAP content of the coating in the reservoir, using compliant thinners, maintaining a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added, maintaining records of solvent additions, and submitting a compliance certification with the semiannual report required by Condition II.E.7.b of this Attachment. The compliance certification shall state that compliant coatings, as determined by

the VHAP content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period. The Permittee is in violation of the standard when a sample of the as-applied coating exceeds the applicable limit established in Condition II.E.4.a.ii, as determined using EPA Method 311, or the viscosity of the coating in the reservoir is less than the viscosity of the initial coating.

iv. If the Permittee chooses to comply with the Condition II.E.2.a of this Attachment through the procedures established in Condition II.E.4.a.iii, the Permittee shall demonstrate continuous compliance by calibrating, maintaining, and operating the appropriate monitoring equipment for the capture/control device (spray booth static pressure indicators, RTO inlet pressure indicator and RTO temperature) according to manufacturer's specifications. The Permittee shall also submit the excess emissions and continuous monitoring system performance report and summary report required by Condition II.E.7.c of this Attachment and §63.10(e) of subpart A. The Permittee shall not operate the capture or control device at a daily average value greater than or less than (as appropriate) the operating parameter values. The daily average value shall be calculated as the average of all values for a monitored parameter recorded during the operating day. [40 CFR 63.804(g)(4)]

v. If the Permittee chooses to comply with the Condition II.E.2.b of this Attachment through the procedures established in Condition II.E.4.b.i, the Permittee shall submit a compliance certification with the semiannual report required by Condition II.E.7.b of this Attachment. The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard. [40 CFR 63.804(g)(5)]

vi. If the Permittee chooses to comply with the Condition II.E.2.b of this Attachment through the procedures established in Condition II.E.4.b.ii, the Permittee shall demonstrate continuous compliance by calibrating, maintaining, and operating the appropriate monitoring equipment for the capture/control device (spray booth static pressure indicators, RTO inlet pressure indicator and RTO temperature) according to manufacturer's specifications. The Permittee shall also submit the excess emissions and continuous monitoring system performance report and summary report required by Condition II.E.7.c of this Attachment and §63.10(e) of subpart A. The Permittee shall not operate the capture or control device at a daily average value greater than or less than (as appropriate) the operating parameter values. The daily average value shall be calculated as the average of all values for a monitored parameter recorded during the operating day. [40 CFR 63.804(g)(6)]

vii. To demonstrate compliance with the Condition II.E.2.c of this Attachment, the Permittee shall submit a compliance certification with the semiannual

report required by Condition II.E.7.b of this Attachment. The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard. [40 CFR 63.804(g)(7)]

viii. For the purpose of demonstrating compliance with the work practice standards in Section II.E.3 of this Attachment, the Permittee shall submit a compliance certification with the semiannual report required by Condition II.E.7.b of this Attachment. The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that the Permittee is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation. [40 CFR 63.804(g)(8)]

viii. All the compliance certifications shall be signed by a responsible official of the company that owns or operates the affected source. [40 CFR 63.804(g)]

5. Performance Test Methods

a. The EPA Method 311 of appendix A of part 63 shall be used in conjunction with formulation data to determine the VHAP content of the liquid coating. Formulation data shall be used to identify VHAP present in the coating. The EPA Method 311 shall then be used to quantify those VHAP identified through formulation data. The EPA Method 311 shall not be used to quantify HAP such as styrene and formaldehyde that are emitted during the cure. The EPA Method 24 (40 CFR part 60, appendix A) shall be used to determine the solids content by weight and the density of coatings. If it is demonstrated to the satisfaction of the Director that a coating does not release VOC or HAP byproducts during the cure, for example, all VOC and HAP present in the coating is solvent, then batch formulation information shall be accepted. The Permittee may request approval from the EPA Administrator to use an alternative method for determining the VHAP content of the coating. In the event of any inconsistency between the EPA Method 24 or Method 311 test data and a facility's formulation data, that is, if the EPA Method 24/311 value is higher, the EPA Method 24/311 test shall govern unless after consultation, a regulated source could demonstrate to the satisfaction of the enforcement agency that the formulation data were correct. Sampling procedures shall follow the guidelines presented in "Standard Procedures for Collection of Coating and Ink Samples for VOC Content Analysis by Reference Method 24 and Reference Method 24A," EPA–340/1–91–010. (Docket No. A–93–10, Item No. IV-A-1). [40 CFR 63.805(a)]

b. The Permittee demonstrating compliance in accordance with Conditions II.E.4.c.iv or II.E.4.c.vi, or complying with any of the other emission limits of Section II.E.2 of this Attachment by operating a capture or control device shall determine the overall control efficiency of the control system (R) as the product of the capture and control device efficiency, using the test methods cited in Condition II.E.5.c and the procedures in Conditions II.E.5.d or e. [40 CFR 63.805(b)]

c. Following test methods shall be used:

i. The EPA Method 18 (40 CFR part 60, appendix A) shall be used to determine the HAP concentration of gaseous air streams. The test shall consist of three separate runs, each lasting a minimum of 30 minutes.

ii. The EPA Method 1 or 1A (40 CFR part 60, appendix A) shall be used for sample and velocity traverses.

iii. The EPA Method 2, 2A, 2C, or 2D (40 CFR part 60, appendix A) shall be used to measure velocity and volumetric flow rates.

iv. The EPA Method 3 (40 CFR part 60, appendix A) shall be used to analyze the exhaust gases.

v. The EPA Method 4 (40 CFR part 60, appendix A) shall be used to measure the moisture in the stack gas.

vi. The EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.

[40 CFR 63.805(c)]

d. The following procedures shall be used to perform gaseous emission test using the following procedures: [40 CFR 63.805(d)]

i. Construct the overall HAP emission reduction system so that all volumetric flow rates and total HAP emissions can be accurately determined by the applicable test methods specified in Condition II.E.5.c of this Attachment. [40 CFR 63.805(d)(1)]

ii. Determine capture efficiency from the affected emission point(s) by capturing, venting, and measuring all HAP emissions from the affected emission point(s). During a performance test, the Permittee shall isolate affected emission point(s) located in an area with other nonaffected gaseous emission sources from all other gaseous emission point(s) by any of the following methods: [40 CFR 63.805(d)(2)]

(1) Build a temporary total enclosure, as defined in 40 CFR 63.801, around the affected emission point(s); or

(2) Use the building that houses the process as the enclosure (see 40 CFR 63.801);

(3) Use any alternative protocol and test method provided they meet either the requirements of the data quality objective (DQO) approach or the lower confidence level (LCL) approach (see 40 CFR 63.801);

(4) Shut down all nonaffected HAP emission point(s) and continue to exhaust fugitive emissions from the affected emission point(s) through any building ventilation system and other room exhausts such as drying ovens. All exhaust air must be vented through stacks suitable for testing; or

(5) Use another methodology approved by the EPA Administrator provided it complies with the EPA criteria for acceptance under part 63, appendix A, Method 301.

iii. Operate the control device with all affected emission points that will subsequently be delivered to the control device connected and operating at maximum production rate; [40 CFR 63.805(d)(3)]

iv. Determine the efficiency (F) of the control device using the following equation: [40 CFR 63.805(d)(4)]

$$F = \frac{\sum_{i=1}^{N} Q_{bi} C_{bi} - \sum_{j=1}^{M} Q_{aj} C_{aj}}{\sum_{i=1}^{N} Q_{bi} C_{bi}}$$ Equation 4

where

Q_{aj}= the volumetric flow rate of gas stream (j) exiting the control device, in dry standard cubic meters per hour.

Q_{bi}= the volumetric flow rate of gas stream (i) entering the control device, in dry standard cubic meters per hour.

C_{aj}= the concentration of VHAP in gas stream (j) exiting the control device, in parts per million by volume.

C_{bi}= the concentration of VHAP in gas stream (i) entering the control device, in parts per million by volume.

v. Determine the efficiency (N) of the capture system using the following equation: [40 CFR 63.805(d)(5)]

$$N = \frac{\sum_{i=1}^{N} Q_{di} C_{di}}{\sum_{i=1}^{N} Q_{di} C_{di} + \sum_{k=1}^{M} Q_{fk} C_{fk}}$$ Equation 5

where

Q_{di}= the volumetric flow rate of gas stream (i) entering the control device from the emission point, in dry standard cubic meters per hour.

Q_{fk}= the volumetric flow rate of uncontrolled gas stream (k) emitted directly to the atmosphere from the emission point, in dry standard cubic meters per hour.

C_{di}= the concentration of VHAP in gas stream (i) entering the control device from the affected source, in parts per million by volume.

C_{fk}= the concentration of VHAP in uncontrolled gas stream (k) emitted directly to the atmosphere from the affected source, in parts per million by volume.

vi. If the Permittee is complying with Condition II.E.2.a in accordance with Condition II.E.4.a.iii, compliance is demonstrated if the product of (F×N)(100) yields a value (R) such that the value of E_{ac} in Equation 2 is no greater than 0.8. [40 CFR 63.805(d)(7)]

vii. If the Permittee is complying with Condition II.D.2.b in accordance with Condition II.E.4.b, compliance is demonstrated if the product of (F×N)(100) yields a value (R) such that the value of G_{ac} in Equation 3 is no greater than 0.2. [40 CFR 63.805(d)(9)]

e. An alternative method to the compliance method in Condition II.E.5.d above is the installation of a permanent total enclosure around the affected emission point(s). A permanent total enclosure presents prima facia evidence that all HAP emissions from the affected emission point(s) are directed to the control device. Each Permittee that complies using a permanent total enclosure shall: [40 CFR 63.805(e)]

i. Demonstrate that the total enclosure meets the requirements in paragraphs (1) to (4) below. If the enclosure does not meet these requirements, the Permittee may apply to the EPA Administrator for approval of the enclosure as a total enclosure on a case-by-case basis. The enclosure shall be considered a total enclosure if it is demonstrated to the satisfaction of the EPA Administrator that all HAP emissions from the affected emission point(s) are contained and vented to the control device. The requirements for automatic approval are as follows: [40 CFR 63.805(e)(1)]

(1) The total area of all natural draft openings shall not exceed 5 percent of the total surface area of the total enclosure's walls, floor, and ceiling;

(2) All sources of emissions within the enclosure shall be a minimum of four equivalent diameters away from each natural draft opening;

(3) The average inward face velocity (FV) across all natural draft openings shall be a minimum of 3,600 meters per hour as determined by the following procedures:

(a) All forced makeup air ducts and all exhaust ducts are constructed so that the volumetric flow rate in each can be accurately determined by the test methods specified in Conditions II.E.5.c.ii and iii of this Attachment. Volumetric flow rates shall be calculated without the adjustment normally made for moisture content; and

(b) Determine FV by the following equation:

$$= \frac{\sum_{j=1}^{n} Q_{out\,j} - \sum_{i=1}^{p} Q_{in\,i}}{\sum_{k=1}^{q} A_k}$$ Equation 6

where

Q_{ini}= the volumetric flow rate of gas stream (i) entering the total enclosure through a forced makeup air duct, in standard cubic meters per hour (wet basis).

Q_{outj}= the volumetric flow rate of gas stream (j) exiting the total enclosure through an exhaust duct or hood, in standard cubic meters per hour (wet basis).

A_k= the area of each natural draft opening (k) in a total enclosure, in square meters.

(4) All access doors and windows whose areas are not included as natural draft openings and are not included in the calculation of FV shall be closed during routine operation of the process.

ii. Determine the control device efficiency using Equation 4, and the test methods and procedures specified in Condition II.E.5.c of this Attachment. [40 CFR 63.805(e)(2)]

iii. If the Permittee is complying with Condition II.E.2.a in accordance with II.E.4.a.iii of this Attachment, compliance is demonstrated if: [40 CFR 63.805(e)(4)]

(1) The installation of a permanent total enclosure is demonstrated (N = 1);

(2) The value of F is determined from Equation 4; and

(3) The product of (F×N)(100) yields a value (R) such that the value of E_{ac} in Equation 2 is no greater than 0.8.

iv. If the Permittee is complying with II.E.2.b in accordance with II.E.4.b.iii, compliance is demonstrated if: [40 CFR 63.805(e)(6)]

(a) The installation of a permanent total enclosure is demonstrated (N=1);

(b) The value of F is determined from Equation 4; and

(c) The product of (F×N)(100) yields a value (R) such that the value of G_{ac} in Equation 3 is no greater than 0.2.

6. Recordkeeping Requirements

a. The Permittee shall fulfill all recordkeeping requirements of §63.10 of subpart A, according to the applicability criteria in 40 CFR 63.800(d). [40 CFR 63.806(a)]

b. The Permittee shall maintain records of the following: [40 CFR 63.806(b)]

i. A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in Condition II.E.2; and

ii. The VHAP content, in kg VHAP/kg solids (lb VHAP/lb solids), as applied, of each finishing material and contact adhesive subject to the emission limits in Condition II.E.2; and

iii. The VOC content, in kg VOC/kg solids (lb VOC/lb solids), as applied, of each strippable booth coating subject to the emission limits in Condition II.E.2.c.

c. The Permittee following the compliance method in Condition II.E.4.a.i shall maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1. [40 CFR 63.806(c)]

d. The Permittee following the compliance procedures under Condition II.E.4.c.iii(2) shall maintain the records required by Condition II.E.6.b as well as records of the following: [40 CFR 63.806(d)]

i. Solvent and coating additions to the continuous coater reservoir;

ii. Viscosity measurements; and

iii. Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance.

e. The Permittee subject to the work practice standards in Condition II.E.3 of this subpart shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to: [40 CFR 63.806(e)]

i. Records demonstrating that the operator training program required by Condition II.E.3.b is in place;

ii. Records collected in accordance with the inspection and maintenance plan required by Condition II.E.3.c;

iii. Records associated with the cleaning solvent accounting system required by Condition II.E.3.d;

iv. Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period as required by Condition II.E.3.h.v.

v. Records associated with the formulation assessment plan required by Condition II.E.3.l; and

vi. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.

f. The Permittee following the compliance method of Condition II.E.4.c.iv shall maintain copies of the calculations demonstrating that the overall control efficiency (R) of the control system results in the value of E_{ac} required by Equations 2, records of the operating parameter values, and copies of the semiannual compliance reports required by Condition II.E.7.c. [40 CFR 63.806(f)]

g. The Permittee following the compliance method of Condition II.E.4.c.vi, shall maintain copies of the calculations demonstrating that the overall control efficiency (R) of the control system results in the applicable value of G_{ac} calculated using Equation 3, records of the operating parameter values, and copies of the semiannual compliance reports required by Condition II.E.7.c. [40 CFR 63.806(g)]

h. The Permittee subject to the emission limits in Condition II.E.2 and following the compliance provisions under Conditions II.E.4.c.i, ii, iii, v, vii and viii shall maintain records of the compliance certifications submitted in accordance with II.E.7.b. for each semiannual period following the compliance date. [40 CFR 63.806(h)]

i. The Permittee shall maintain records of all other information submitted with the compliance status report required by 40 CFR 63.9(h) and the semiannual reports required by Condition II.E.7.b. [40 CFR 63.806(i)]

j. The Permittee shall maintain all records in accordance with the requirements of 40 CFR 63.10(b)(1). [40 CFR 63.806(j)]

7. Reporting requirements.

a. The Permittee shall fulfill all reporting requirements of 40 CFR 63.7 through 63.10 of subpart A (General Provisions) according to the applicability criteria in 40 CFR 63.800(d). [40 CFR 63.807(a)]

b. The Permittee demonstrating compliance in accordance with Conditions II.E.4.c.i, ii, iii, v, vii and viii shall submit a report covering the previous 6 months of wood furniture manufacturing operations: [40 CFR 63.807(c)]

i. The first report shall be submitted 30 calendar days after the end of the first 6-month period following the compliance date.

ii. Subsequent reports shall be submitted 30 calendar days after the end of each 6-month period following the first report.

iii. The semiannual reports shall include the information required by Conditions II.E.4.c.i, ii, iii, v, vii and viii, a statement of whether the affected source was in compliance or noncompliance, and, if the affected source was in noncompliance, the measures taken to bring the affected source into compliance.

iv. The frequency of the reports required by paragraph b of this section shall not be reduced from semiannually regardless of the history of the Permittee's compliance status.

c. To demonstrate compliance in accordance with Conditions II.E.4.c.iv and vi of this Attachment, the Permittee shall submit the excess emissions and continuous monitoring system performance report and summary report required by 40 CFR 63.10(e) of subpart A. The report shall include the monitored operating parameter values required by Conditions II.D.4.c.iv and vi. If the source experiences excess emissions, the report shall be submitted quarterly for at least 1 year after the excess emissions occur and until a request to reduce reporting frequency is approved, as indicated in 40 CFR 63.10(e)(3)(C). If no excess emissions occur, the report shall be submitted semiannually. [40 CFR 63.807(d)]

III. FUEL-BURNING EQUIPMENT

A. Applicability

This section is applicable to following equipment

1. Process Boilers PB-1, PB-2 and PB-3

2. Co-Ray-Vac Heating System CRV-1

B. Fuel Limitation

The Permittee shall only burn natural gas in the equipment listed above.

[A.A.C. R18-2-306.01.A and -331.A.3.a]
[Material Permit Condition is indicated by underline and italics]

C. Particulate Matter and Opacity

1. Emissions Limitations and Standards

a. The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from the boilers and Co-Ray-Vac heating system into the atmosphere in excess of the amounts calculated by the following equation: [A.A.C. R18-2-724.C.1]

$E = 1.02\ Q^{0.769}$

Where

E = the maximum allowable particulate emission rate in pounds-mass per hour
Q = the heat input in million Btu per hour

b. For purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The total heat input of all fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter, which may be emitted. [A.A.C. R18-2-724.B]

c. The Permittee shall not cause, allow or permit the opacity of any plume or effluent from any boiler to exceed 15%. [A.A.C. R18-2-724.J]

2. Monitoring, Recordkeeping, and Reporting

a. The Permittee shall keep records of fuel supplier certifications or letters from fuel suppliers, containing information regarding the name of the fuel supplier and lower heating value of the fuel. These records shall be made available to ADEQ upon request. [A.A.C. R18-2-306.A.3.c]

b. A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions emanating from the stacks of all the boilers and co-ray-vac system. If the opacity of the emissions observed appears to exceed 15%, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the initial survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, name of observer, date and time of observation, and the results of the observation. [A.A.C. R18-2-306.A.3.c]

c. If the observation results in a Method 9 opacity reading in excess of 15%, the Permittee shall report this to ADEQ as excess emission as per Section XII of Attachment "A" and initiate appropriate corrective action to reduce the opacity below 15%. The Permittee shall keep a record of the corrective action performed. [A.A.C. R18-2-724.J]

3. Permit Shield

Compliance with this Section shall be deemed compliance with A.A.C. R18-2-724.B, A.A.C R18-2-724.C.1, and A.A.C R18-2-724.J. [A.A.C. R18-2-325]

IV. WOODWORKING OPERATIONS

A. Applicability

This Section is applicable to the wood working operations (milling, hole-boring, and sanding/dusting operations) in the finishing lines, and wood crusher operations.

B. Particulate Matter and Opacity

1. Emission Limitations/Standards

a. *Baghouse BH-3 (for dust collection from the finishing operation) shall be vented indoors, within the finishing line building enclosure.*
[A.A.C. R18-2-306.01.A and -331.A.3.a]
[Material Permit Condition is indicated by underline and italics]

b. In any one hour period, the Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere from baghouses BH-1, BH-2 and wood crusher system in excess of the amounts calculated by one of the following equations:

i. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emission shall be determined by the following equation:

$$E = 4.1P^{0.67}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour

P = the process weight in tons-mass per hour

[A.A.C. R18-2-730.A.1.a]

ii. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emission shall be determined by the following equation:

$E = 55P^{0.11} - 40$

where "E" and "P" are defined as indicated in Paragraph (1) of this subsection.

[A.A.C. R18-2-730.A.1.b]

c. When applying the process weight rate equation, the Permittee shall utilize the total process weight from all similar units employing a similar type process to determine the maximum allowable emissions of particulate matter.

[A.A.C. R18-2-730.B]

d. The Permittee shall not cause, allow or permit to be emitted into the atmosphere, any plume of effluent, which exceeds 20% opacity as measured by EPA Reference Method 9. [A.A.C. R18-2-702.B]

2. Air Pollution Control Requirements

The Permittee shall continuously operate and maintain *the baghouses BH-1, BH-2 and BH-3 in accordance with manufacturer's specifications and consistent with good air pollution control practice for the control of particulate matter emissions from the woodworking operations.* [A.A.C. R18-2-306.A.3.c, A.A.C. R18-2-331.A.3.e]

[Material Permit Condition is indicated by underline and italics]

3. Monitoring, Recordkeeping, and Reporting

a. A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions emanating from baghouses BH-1 & BH-2, and wood crusher system. If the opacity of the emissions observed appears to exceed 20%, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the initial survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, name of observer, date and time of observation, and the results of the observation.

[A.A.C. R18-2-306.A.3.c]

b. If the observation results in a Method 9 opacity reading in excess of 20%, the Permittee shall report this to ADEQ as excess emission and initiate appropriate corrective action to reduce the opacity below 20%. The Permittee shall keep a record of the corrective action performed. [A.A.C. R18-2-306.A.3.c]

c. The Permittee shall perform a quarterly inspection of all bags in the woodworking baghouse dust control systems (BH-1, BH-2 and BH-3). All defective bags shall be replaced as soon as practicable. [A.A.C. R18-2-306.A.3.c]

d. The Permittee shall maintain a log of dust collection and control system operation, maintenance, inspections, and any corrective actions taken. This log shall be kept on site and shall be readily available to ADEQ upon request. [A.A.C. R18-2-306.A.4]

C. Permit Shield

Compliance with the Conditions of this Section shall be deemed compliance with A.A.C. R18-2-730.A, -730.B, and A.A.C. R18-2-702.B. [A.A.C. R18-2-325]

V. FUGITIVE DUST REQUIREMENTS

A. Applicability

This Section applies to any source of fugitive dust in the facility.

B. Particulate Matter and Opacity

1. Open Areas, Roadways & Streets, Storage Piles, and Material Handling

a. Emission Limitations/Standards

i. Opacity of emissions from any non-point source shall not be greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9. [A.A.C. R18-2-614]

ii. The Permittee shall not cause, allow or permit visible emissions from any point source, in excess of 20 percent opacity. [A.A.C-R18-2-702.B]

iii. The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:

(a) Keep dust and other types of air contaminants to a minimum in an open area where construction operations, repair operations, demolition activities, clearing operations, leveling operations, or any earth moving or excavating activities are taking place, by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means; [A.A.C. R18-2-604.A]

(b) Keep dust to a minimum from driveways, parking areas, and vacant lots where motor vehicular activity occurs by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means; [A.A.C. R18-2-604.B]

(c) Keep dust and other particulates to a minimum by employing dust suppressants, temporary paving, detouring, wetting down or by other reasonable means when a roadway is repaired, constructed, or reconstructed; [A.A.C. R18-2-605.A]

(d) Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust; [A.A.C. R18-2-605.B]

(e) Take reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods when crushing, handling, or conveying material likely to give rise to airborne dust; [A.A.C. R18-2-606]

(f) Take reasonable precautions such as chemical stabilization, wetting, or covering when organic or inorganic dust producing material is being stacked, piled, or otherwise stored; [A.A.C. R18-2-607.A]

(g) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material, or with the use of spray bars and wetting agents; [A.A.C. R18-2-607.B]

(h) Any other method as proposed by the Permittee and approved by the Director. [A.A.C. R18-2-306.A.3.c]

b. Monitoring and Recordkeeping Requirements

i. The Permittee shall maintain records of the dates on which any of the activities listed in Conditions V.B.1.a.iii.(a) through V.B.1.a.iii(h) above were performed and the control measures that were adopted. [A.A.C. R18-2-306.A.3.c]

ii. Opacity Monitoring Requirements

(a) A certified Method 9 observer shall conduct a monthly visual survey of visible emissions from the fugitive dust sources. The Permittee shall keep a record of the name of the observer, the date and location on which the observation was made, and the results of the observation.

(b) If the observer sees a visible emission from a fugitive dust source that on an instantaneous basis appears to exceed applicable opacity standard, then the observer shall, if practicable, take a six-minute Method 9 observation of the visible emission.

(1) If the six-minute opacity of the visible emission is less than or equal to applicable opacity standard, the observer shall make a record of the following:

a) Location, date, and time of the observation; and

b) The results of the Method 9 observation.

(2). If the six-minute opacity of the visible emission exceeds applicable opacity standard, then the Permittee shall do the following:

a) Adjust or repair the controls or equipment to reduce opacity to below the applicable standard; and

b) Report it as an excess emission under Section XII.A of Attachment "A".
[A.A.C. R18-2-306.A.3.c]

c. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-604.A, A.A.C. R18-2-604.B, A.A.C. R18-2-605, A.A.C. R18-2-606, A.A.C. R18-2-607, and A.A.C. R18-2-614. [A.A.C. R18-2-325]

VI. MOBILE SOURCE REQUIREMENTS

A. Applicability

The requirements of this Section are applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or agricultural equipment used in normal farm operations. Mobile sources shall not include portable sources as defined in A.A.C. R18-2-101.90.
[A.A.C.R18-2-801.A]

B. Particulate Matter and Opacity

1. Emission Limitations/Standards

a. Off-Road Machinery

The Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than ten consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. Off-road machinery shall include trucks, graders, scrapers, rollers, and other construction and mining machinery not normally driven on a completed public roadway. [A.A.C.R18-2-802.A and -802.B]

b. Roadway and Site Cleaning Machinery

i. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than ten consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes.
[A.A.C.R18-2-804.A]

ii. The Permittee shall take reasonable precautions, such as the use of dust suppressants, before the cleaning of a site, roadway, or alley. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means. [A.A.C. R18-2-804.B]

c. Unless otherwise specified, no mobile source shall emit smoke or dust the opacity of which exceeds 40%. [A.A.C.R18-2-801.B]

2. Recordkeeping Requirement

The Permittee shall keep a record of all emissions related maintenance activities performed

on the Permittee's mobile sources stationed at the facility as per manufacturer's specifications. [A.A.C.R18-2-306.A.5.a]

3. Permit Shield

Compliance with this Section shall be deemed compliance with A.A.C. R18-2-801, A.A.C. R18-2-802.A, A.A.C. R18-2-804.A and A.A.C. R18-2-804.B. [A.A.C.R18-2-325]

VII. OTHER PERIODIC ACTIVITY REQUIREMENTS

A. Abrasive Blasting

Particulate Matter and Opacity

1. Emission Limitations/Standards

a. The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:

i. Wet blasting;

ii. Effective enclosures with necessary dust collecting equipment; or

iii. Any other method approved by the Director.

[A.A.C. R18-2-726]

b. Opacity

The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 20% opacity, as measured by EPA Reference Method 9. [A.A.C. R18-2-702.B]

2. Monitoring and Recordkeeping Requirement

Each time an abrasive blasting project is conducted, the Permittee shall log in ink or in an electronic format, a record of the following:

a. The date the project was conducted;

b. The duration of the project; and

c. Type of control measures employed.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-726, A.A.C. R18-2-702.B. [A.A.C.R18-2-325]

B. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation/Standard

The Permittee shall comply with all of the requirements of 40 CFR 61 Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos). [A.A.C. R18-2-1101.A.8]

2. Monitoring and Recordkeeping Requirements

The Permittee shall keep all required records in a file. The required records shall include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents. [A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-1101.A.8. [A.A.C. R18-2-325]

ATTACHMENT "C"

MASS BALANCE VOC EMISSIONS CALCULATION PROCEDURES

Air Quality Control Permit Number 42868

for

American Woodmark Corporation

I. General Variable Definitions:

$I_{PROCESS}$ = VOC input to a given process/line (usage, in lb VOC/month)

$E_{PROCESS}$ = VOC emission rate from a given process/line (lb VOC/month)

C_c = VOC concentration of a finishing material (c), in lb VOC/lb solids, as applied.

M = Mass of solids in finishing material used monthly, lb solids/month

S = VOC content of a solvent, expressed as a weight fraction, added to finishing materials

W = Amount of solvent, in pounds, added to finishing materials during the monthly period

CW_c = VOC concentration of a waste material (c), in lb VOC/ lb material.

MW_c = Mass of a waste material (c) removed from site under manifest, in lb/month.

II. Finishing Operation Emission Calculations

A. Finishing Lines 1 and 4

$$E_{FL1or4} = (I_{FL} - VOC_{RECLAIM}) * \{(1 - (N_{FL1\ or\ 4} * F_{RTO})\}$$

Where:

I_{FL} = $M_{c1}C_{c1} + M_{c2}C_{c2} + * * * * + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + * * * * + S_nW_n$

$VOC_{RECLAIM}$ = VOC material reclaimed in Finishing Line 1 or 4
= $(MW_{c1}CW_{c1} + MW_{c2}CW_{c2} + * * * * + MW_{cn}CW_{cn})$

$N_{FL\ 1\ or\ 4}$ = Capture Efficiency of Finishing Line Enclosure/Collection System

F_{RTO} = Control Efficiency of Regenerative Thermal Oxidizer

B. Finishing Line *3*

E_{FL3} = $I_{FL3} - VOC_{RECLAIM}$

Where:

I_{FL3} = $M_{c1}C_{c1} + M_{c2}C_{c2} + * * * * + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + * * * * + S_nW_n$

$VOC_{RECLAIM}$ = VOC material reclaimed in Finishing Line 3
= $(MW_{c1}CW_{c1} + MW_{c2}CW_{c2} + * * * * + MW_{cn}CW_{cn})$

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Air Quality Control Permit No. 42868
for
American Woodmark Corporation

ATTACHMENT "D": EQUIPMENT LIST

EQUIPMENT TYPE	MAX. RATED CAPACITY	MAKE	MODEL	SERIAL NUMBER	DATE OF MFG.	EQUIP. ID#	Stack #
FINISHING LINE 1							
Manual Sanding Downdraft Conveyor	N/A	Cefla	TN7300/A/RBT/S	1172-1.1	2001	M1	
Rotary Sanding Machine	N/A	Quick-wood	PRO1400V	7120	1999	M2	**BH3**
Panel Cleaning Machine	N/A	Sorbini	VS/33-ACT-G/S	mp1sct21350	2001	M3	
Automatic Spray Booth	108.48 gph	Cefla	RotoStain ROT 10+10	11172/1.4a	2001	M4a	**BP-1/ RTO-1**
Belt Cleaner	6.88 gph	Cefla	RotoStain ROT 10+10	11172/1.4b	2001	M4b	
Stain Wiping Machine	N/A	Sorbini	VS/26-4C/S	MT450021351	2001	M5a	
Manual Stain Wiping Downdraft Conveyor	N/A	Sorbini	VS/26-4C/S	MT4C0021331	2001	M5b	
Multi-level Stacker Unit	N/A	Cefla	TR3P3800/2V/2SCT-FIFO	11172/1.6	2001	M6	
Drying Oven	N/A	Cefla	PF7400/6/S	11172/1.7	2001	M7	
Turn Over Unit	N/A	Cefla	RIB/B/3500	11172/1.8	2001	M8	
Roller Conveyor	N/A	Cefla	TR3500/133/2V2S	11172/1.9	2001	M9	
Rotary Sanding Machine	N/A	Slipcon	DiscMaster DDBB	10450	2004	M10	**BH3**
Manual Sanding Downdraft Conveyor	N/A	Cefla	TN3500/A	11172/1.10	2001	M11	

EQUIPMENT TYPE	MAX. RATED CAPACITY	MAKE	MODEL	SERIAL NUMBER	DATE OF MFG.	EQUIP. ID#	Stack #
Panel Cleaning Machine	N/A	Sorbini	VS/33-ACT-G/S	MP1SCT21349	2001	M12	
Automatic Spray Booth	107.2 gph	Cefla	RotoStain ROT 10+10	11172/1.13a	2001	M13a	**BP-2/ RTO-1**
Belt Cleaner	6.88 gph	Cefla	RotoStain ROT 10+10	11172/1.13b	2001	M13b	
Drying Oven/Tunnel	N/A	Cefla	FEV E 2/7 & TN 22000	11172/1.14	2001	M14	
180 Degree Transfer Unit	N/A	Cefla	GT180/3500/5940-133	11172/1.15	2001	M15	
Automatic Spray Booth	108.48 gph	Cefla	RotoStain ROT 10+10	11172/1.16A	2001	M16a	**BP-3/ RTO-1**
Belt Cleaner	6.88 gph	Cefla	RotoStain ROT 10+10	11172/1.16b	2001	M16b	
Stain Wiping Machine	N/A	Sorbini	VS/26-4C/S	MT4S0021352	2001	M17a	
Manual Stain Downdraft Conveyor	N/A	Cefla	VS64c	MT46002352	2001	M17b	
Belt Conveyor	N/A	Cefla	TN5500W	11172/1.18	2001	M18	
Belt Conveyor	N/A	Cefla	TN5500W	11172/1.19	2001	M19	
Multi-level Stacker Unit	N/A	Cefla	TR3P3800/2V/2SCT-FIFO	11172/1.20	2001	M20	
Drying Oven	N/A	Cefla	PF7400/6/S	11172/1.21	2001	M21	
Lateral Transfer Unit	N/A	Cefla	G1180/3500/5490-13325	11172/1.22	2001	M22	
Outfeed Roller Conveyor	N/A	Cefla	TR3500/133/2V2S	11172/1.23	2001	M23	
Infeed Belt Conveyor	N/A	Cefla	TN3650/RBT	11172/1.24	2001	M24	

EQUIPMENT TYPE	MAX. RATED CAPACITY	MAKE	MODEL	SERIAL NUMBER	DATE OF MFG.	EQUIP. ID#	Stack #
Panel Cleaning Machine	N/A	Sorbini	VS/33-ACT-G/S	MP1SC121348	2001	M25	BH3
Automatic Spray Booth	95.48 gph	Cefla	SGM 12+12	11172/1.26a	2001	M26A	**BP-4/ RTO-1**
Belt Cleaner	6.88 gph	Cefla	SGM 12+12	11172/1.26b	2001	M26b	
Multi-level Stacker Unit	N/A	Cefla	TR3P3800/2V/2SCT-FIFO	11172/1.27	2001	M27	
Drying Oven - Flash Zone	N/A	Cefla	FV4/3500/133/122/AER/S	11172/1.28A	2001	M28a	
Drying Oven - Cure Zone	N/A	Cefla	FV4/3500/133/122/AER/S	11172/1.28B	2001	M28b	
Drying Oven - Cool Down Zone	N/A	Cefla	FV4/3500/133/122/AER/S	11172/1.28C	2001	M28c	**EXH-1**
Roller Conveyor	N/A	Cefla	TR3500/133/S	11172/1.29	2001	M29	
Turn Over Unit	N/A	Cefla	RIB/B/3500	11172/1.30	2001	M30	
Roll Conveyor	N/A	Cefla	TR3500/133/2V2S	11172/1.31	2001	M31	
Roll Coater	N/A	Sorbini	T/20-2MF/RE/RU	MR2TF21353	2001	M32	
Automatic Spray Booth	95.84 gph	Cefla	SGM 12+12	11172/1.33a	2001	M33a	**BP-5/ RTO-1**
Belt Cleaner	6.88 gph	Cefla	SGM 12+12	11172/1.33b	2001	M33b	
Multi-Level Stacker Unit	N/A	Cefla	TR3P3800/2V/2SCT-FIFO	11172/34	2001	M34	
Drying Oven - Flash Zone	N/A	Cefla	FV4/3500/133/122/AER/S	11172/1.35A	2001	M35a	
Drying Oven - Cure Zone	N/A	Cefla	FV4/3500/133/122/AER/S	11172/1.35B	2001	M35b	

EQUIPMENT TYPE	MAX. RATED CAPACITY	MAKE	MODEL	SERIAL NUMBER	DATE OF MFG.	EQUIP. ID#	Stack #
Drying Oven - Cool Down Zone	N/A	Cefla	FV4/3500/133/122/AER/S	11172/1.35C	2001	M35c	**EXH-2**
Roller Conveyor	N/A	Cefla	TR3500/133/2V2S	11172/1.36	2001	M36	**BH3**
Rotary Sanding Machine	N/A	Quickwood	PRO1400V	7239	2001	M37	
Manual Sanding Downdraft Conveyor	N/A	Cefla	TN6000/A	11172/1.38	2001	M38	
Panel Cleaning Machine	N/A	Sorbini	VS/33-ACT-G/S	MP1SC021354	2001	M39	
Automatic Spray Booth	63.36 gph	Cefla	SGM 12+12	11172/1.40a	2001	M40a	**BP-6/ RTO-1**
Belt Cleaner	6.88 gph	Cefla	SGM 12+12	11172/1.40b	2001	M40b	
Multi-level Stacker Unit	N/A	Cefla	TR3P3800/2V2SCT-FIFO	11172/1.41	2001	M41	
Drying Oven - Flash Zone	N/A	Cefla	FV4/3500/133/122/AER/S	11172/1.42a	2001	M42a	
Drying Oven - Cure Zone	N/A	Cefla	FV4/3500/133/122/AER/S	11172/1.42b	2001	M42b	
Drying Oven - Cool Down Zone	N/A	Cefla	FV4/3500/133/122/AER/S	11172/1.42c	2001	M42c	**EXH-3**
Roll Conveyor	N/A	Cefla	TR3500/133/S	11172/1.43	2001	M43	
Turn Over Unit	N/A	Cefla	RIB/B/3500	11172/1.44	2001	M44	
Roll Conveyor	N/A	Cefla	TR3500/133/2V2S	11172/1.45	2001	M45	
Rotary Sanding Machine	N/A	Slipcon	DiscMaster DDBB	10449	2004	M46	**BH-3**
Manual Sanding Downdraft Conveyor	N/A	Cefla	TN 5500/A	11172/1.47	2001	M47	
Manual Sanding Downdraft Conveyor	N/A	Cefla	TN5500/A	11172/1.48	2001	M48	

EQUIPMENT TYPE	MAX. RATED CAPACITY	MAKE	MODEL	SERIAL NUMBER	DATE OF MFG.	EQUIP. ID#	Stack #
Panel Cleaning Machine	N/A	CCI Technolog	D2-TBV-54H	D004-007B	2004	M49	
Automatic Spray Booth	63.36 gph	Cefla	SGM 12+12	11172/1.50a	2001	M50a	**BP-7/ RTO-1**
Belt Cleaner	6.88 gph	Cefla	SGM 12+12	11172/1.50b	2001	M50b	
Multi-level Stacker Unit	N/A	Cefla	TR3P3800/2V/2SCT-FIFO	11172/1.51	2001	M51	
Drying Oven - Flash Zone	N/A	Cefla	FV4/3500/133/122/AER/S	11172/1.52a	2001	M52a	
Drying Oven - Cure Zone	N/A	Cefla	FV4/3500/133/122/AER/S	11172/1.52b	2001	M52b	
Drying Oven - Cool Down Zone	N/A	Cefla	FV4/3500/133/122/AER/S	11172/1.52c	2001	M52c	**EXH-4**
Roll Conveyor	N/A	Cefla	TR3500/133/2V2S	11172/1.53	2001	M53	
Roll Conveyor	N/A	Cefla	TR3500/133/2V2S	11172/1.54	2001	M54	
EXPEDITE LINE-3							
Expedite Booth #1 Spray Booth	27.12 lb/hr	Cefla	LTAM/42/62	90027269-4	2001	E1.2	**EXH-7**
Drying Enclosure/Oven	N/A	Cefla	LPF40/50	90027269-1	2001	E1.4	**EXH-8**
Expedite Booth #2 Spray Booth	27.12 lb/hr	Cefla	LPA40-70	90027131	2001	E2.6	**EXH-9**
Drying Oven/Tunnel	N/A	Cefla	EU2/3/1	11191/3.07	2001	E2.7	**EXH10**
HYBRID LINE-4							
Belt Conveyor		Cefla	TN3650/RBT	04010/1	2004	H10	
Panel Cleaning Machine	N/A	Sorbini	VS/33-ACT-G/S	MP1SC081355	2001	H11	

EQUIPMENT TYPE	MAX. RATED CAPACITY	MAKE	MODEL	SERIAL NUMBER	DATE OF MFG.	EQUIP. ID#	Stack #
Belt Conveyor	N/A	Cefla	TN3500	04010/3	2004	H12	
Single head differential Roll Coater	0.44 gph	Sorbini	T/20-MR/S/R	MR1TFF24087	2004	H13	**EXH-15**
Single head differential Roll Coater	0.44 gph	Sorbini	T/20-MR/S/R	MR1TFF24088	2004	H14	
UV Cure Oven	N/A	Cefla	UV2000 M/2 TTE3000	04010/6	2004	H15	
Single head differential Roll Coater	.44 gph	Sorbini	T/20-MR/S/R	MR1TFF24089	2004	H16	
Single head differential Roll Coater	.44 gph	Sorbini	T/20-MR/S/R	MR1TFF24030	2004	H17	
UV Cure Oven	N/A	Cefla	UV2000 M/2 TTE3000	04010/9	2004	H18	
Roller Conveyor	N/A	Cefla	TR3800/2/V2S/133	04010/10	2004	H19	
Turn Over Unit	N/A	Cefla	RIB/B/3500	04010/11	2004	H20	
Roller Conveyor	N/A	Cefla	TR3800/2V/2S/133.	04010/12	2004	H21	
Roller Conveyor	N/A	Cefla	TR6155/133	04010/13	2004	H22	
180 Transfer Unit	N/A	Cefla	GT180/3500/5487/133	04010/14	2004	H23	
Roller Conveyor Outgoing	N/A	Cefla	TR4000/133	04010/15	2004	H24	
Belt Conveyor Input	N/A	Cefla	TN3650/RBT	11190/1	2002	H25	
Rotary Sanding Machine	N/A	Quickwook	PRO1400V	7236	2001	H26	**BH3**
Belt Conveyor	N/A	Cefla	TN3500	04010/17	2004	H27	

EQUIPMENT TYPE	MAX. RATED CAPACITY	MAKE	MODEL	SERIAL NUMBER	DATE OF MFG.	EQUIP. ID#	Stack #
Panel Cleaning Machine	N/A	Sorbini	VS/33-ACT-G/S	MP1SC021412	2002	H28	
Automatic Spray Booth	48.0 gph	Cefla	EcoSprayer ROC3-W	11190/3a	2002	H29a	**BP-10/ RTO-1**
Belt Cleaner	6.88 gph	Cefla	EcoSprayer ROC3-W	11190/3b	2002	H29b	
Stain Wiping Machine	N/A	Sorbini	VS/26-4C/S	MT250024091	2004	H30a	
Downdraft Conveyor	N/A	Sorbini	VS/26-4C/S	MT250024091	2004	H30b	
Double Headed Reverse Roll Coater	3.44 gph	Sorbini	T/20-MR/S/R	MR2TTR21413	2001	H31	
Wiping Conveyor – Vacuum Belt	3.44 gph	Cefla	TN 4000/W/S/C	11191/6	2001	H32a	
Belt Cleaner	3.44 gph	Cefla	TN 4000/W/S/C	11191/6	2001	H32b	
Roll Coater	14.6 gph	Sorbini	VS26/4C/4	MR1TTF4115	2004	H33	
Wiping Conveyor Vacuum Belt	3.44 gph	Cefla	TN 7500/W/S	11190/7	2001	H34a	
Belt Cleaner	3.44 gph	Cefla	TN 7500/W/S	11190/7	2001	H34b	
Multi-Level Stacking Unit	N/A	Cefla	TR3P3800/2V2S/CT-FIFO	11190/9	2002	H35	
Drying Oven - Flash/Cure Zone	N/A	Cefla	FV2/3500/133/ 30/AE	11190/10	2001	H36	
Roller Conveyor	N/A	Cefla	TR3800/2V/2S/133	11190/11	2002	H37	
Down Draft Sanding Belts	N/A	Cefla	TN6000/A	11190/12	2002	H38	
Down Draft Sanding Belts	N/A	Cefla	TN6000/A	11190/13	2002	H39	

EQUIPMENT TYPE	MAX. RATED CAPACITY	MAKE	MODEL	SERIAL NUMBER	DATE OF MFG.	EQUIP. ID#	Stack #
Panel Cleaning Machine	N/A	Sorbini	VS/33/ACT-F	MP1SC021458	2002	H40	**BH3**
Automatic Spray Booth	31.68 lb/hr	Cefla	EcoSprayer ROC3-W	11190/15a	2002	H41a	**BP-11/ RTO-1**
Belt Cleaner	6.88 lb/hr	Cefla	EcoSprayerROC3-W	11190/15b	2002	H41b	
Mulit-Level Stacking Unit	N/A	Cefla	TR3P/3800/2V/2S/C T-FIFO	11190/16	2002	H42	
Drying Oven - Flash Zone	N/A	Cefla	FV4/3500/133/ 88/AER	11190/17a	2002	H43a	
Drying Oven - Cure Zone	N/A	Cefla	FV4/3500/133/ 88/AER	11190/17b	2002	H43b	
Drying Oven - Cool Down Zone	N/A	Cefla	FV4/3500/133/ 88/AER	11190/17c	2002	H43c	**EXH-12**
Roller Conveyor	N/A	Cefla	TR3800/2V/2S/133	11190/18	2002	H44	
Rotary Sanding Machine	N/A	Quickwoo d	PRO1400V	7235	2001	H45	**BH-3**
Down Draft Sanding Belt	N/A	Cefla	TN4000/A	04010/23	2004	H46	
Feather Duster	N/A	CCI Technolog	DQ-TBV-54H	D004-007A	2004	H47	
Automatic Spray Booth	40.32 gph	Cefla	Easy 2000	04010/25	2004	H48a	**BP-12/ RTO-1**
Belt Cleaner	6.88 gph	Cefla	Easy 2000	04010/25	2004	H48b	
Drying Oven - Flash Zone	N/A	Cefla	FV4/3500/88/S	04010/27a	2004	H50a	
Drying Oven - Cure Zone	N/A	Cefla	FV4/3500/88/S	04010/27b	2004	H50b	
Drying Oven - Cool Down Zone	N/A	Cefla	FV4/3500/ 88/S	04010/27C	2004	H50c	**EXH-14**

EQUIPMENT TYPE	MAX. RATED CAPACITY	MAKE	MODEL	SERIAL NUMBER	DATE OF MFG.	EQUIP. ID#	Stack #
Roll Conveyor	N/A	Cefla	TR3800/2V/2S/133	04010/28	2004	H51	
Dust Collector - 1	11,500 cfm @ 18" WG, Elev. 3225'	Torit/ Donaldson	24-FM	N/A	1986	BH-1	
Dust Collector - 2	10,000 cfm @ 17' WG, Elev. 3225'	Torit/ Donaldson	HPT-64	IG 536364	1999	BH-2	
Dust Collector - 3	10,000 cfm @ 17' WG, Elev. 3225'	Torit/ Donaldson	484-RF	2001215100	2001	BH-3	
Power Boiler 1	4.5 MMBtu/hr	RBI	33HB40004R2CCTS	120126198	2001	PB-1	
Power Boiler 2	4.5 MMBtu/hr	RBI	33HB40004R2CCTS	120126196	2001	PB-2	
Power Boiler 3	4.5 MMBtu/hr	RBI	33HB40004R2CCTS	120126197	2001	PB-3	
Co-ray-vac Heating System	2.54 MMBtu/ hr	Co Ray Vac	CRV-A6 CRV-B10	420145 9043750	1986 1993	CRV-1	
Regenerative Thermal Oxidizer	10 MMBtu/hr; 60,000 scfm	MEGTEC Systems	ENTERPRISE II -700-95	113444	2001	RTO-1	
Wood crusher		Vecoplan	RG 52	N/A	N/A	N/A	