

# DRAFT PERMIT

# **CLASSIAIR QUALITY PERMIT**

#### DRAFT PERMIT No. 95882

PERMITTEE: American Woodmark Corporation FACILITY: American Woodmark Corporation

PLACE ID: Class I Air Quality Permit

DATE ISSUED: Date Pending EXPIRY DATE: Date Pending

#### **SUMMARY**

This Class I permit is issued to American Woodmark Corporation, the Permittee, for the continued operation of a kitchen and bath cabinet finishing and assembly facility. The facility is located at 4475 E. Mohave Airport Rd., Kingman, Arizona 86401 in Mohave County. This permit renews and supersedes Permit No. 67347.

The facility is subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) Subpart JJ for Wood Furniture Manufacturing Operations. Without the controls or operating limits specified in the permit, the facility has the potential to emit volatile organic compounds in excess of 250 tons per year. Since the facility is limited to 250 tons per year, it is not a Prevention of Significant Deterioration (PSD) major source as defined under Arizona Administrative Code (A.A.C.) R18-2-401. In addition, the facility has the potential to emit hazardous air pollutants in excess of 25 tons per year. Therefore, the facility qualifies for a Class I permit under A.A.C. R18-101.75.c.

This permit is issued in accordance with Arizona Revised Statutes (ARS) 49-426. It contains requirements from Title 18, Chapter 2 of the A.A.C. and Title 40 of the Code of Federal Regulations. All definitions, terms, and conditions used in this permit conform to those in the A.A.C. R18-2-101 et. seq. and Title 40 of the Code of Federal Regulations (CFR), except as otherwise defined in this permit.



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#### ATTACHMENT "A": GENERAL PROVISIONS

#### I. PERMIT EXPIRATION AND RENEWAL

**A.** This permit is valid for a period of five (5) years from the date of issuance.

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

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

[A.A.C. R18-2-304.D.2]

#### II. COMPLIANCE WITH PERMIT CONDITIONS

A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the Arizona Revised Statutes (A.R.S.) Title 49, Chapter 3, and the air quality rules under Title 18, Chapter 2 of the Arizona Administrative Code. Any permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, 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.

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

**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.

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

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

**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.

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

- **B.** 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 the original permit or any of it terms and conditions has been extended 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; [A.A.C. R18-2-321.A.1.a]
  - 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;

[A.A.C. R18-2-321.A.1.b]



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; and

[A.A.C. R18-2-321.A.1.c]

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

[A.A.C. R18-2-321.A.1.d]

C. Proceedings to reopen and issue 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, affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Condition III.B.1 shall not result in a resetting of the 5-year permit term.

[A.A.C. R18-2-321.A.2]

#### IV. POSTING OF PERMIT

A. The Permittee shall post this permit or a certificate of permit issuance at the facility 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:

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

- 1. Current permit number; or
- 2. Serial number or other equipment identification number (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.

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

#### V. FEE PAYMENT

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

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

# VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE

**A.** The Permittee shall complete and submit to the Director an emissions inventory questionnaire no later than June 1 of each year.

[A.A.C. R18-2-327.A.1.a]

**B.** The emissions inventory questionnaire shall be on an electronic or paper form provided by the Director and shall include the information required by A.A.C. R18-2-327.A.3 for the previous calendar year.

[A.A.C. R18-2-327.A.3]

C. The Permittee shall submit to the Director an amendment to an emissions inventory questionnaire, containing the documentation required by A.A.C.R18-2-327.A.3, whenever the Permittee discovers or receives notice, within two years of the original submittal, that incorrect or insufficient information was submitted to the Director by a previous emissions inventory questionnaire. The amendment shall be submitted to the Director within 30 days of discovery or receipt of notice. If the incorrect or insufficient information resulted in an incorrect annual emissions fee, the Director shall require that additional payment be made



or shall apply an amount as a credit to a future annual emissions fee. The submittal of an amendment shall not subject the Permittee to an enforcement action or a civil or criminal penalty if the original submittal of incorrect or insufficient information was not due to willful neglect.

#### VII. COMPLIANCE CERTIFICATION

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 15<sup>th</sup>, and shall report the compliance status of the source during the period between October 1<sup>st</sup> of the previous year and March 31<sup>st</sup> of the current year. The second certification shall be submitted no later than November 15<sup>th</sup>, and shall report the compliance status of the source during the period between April 1<sup>st</sup> and September 30<sup>th</sup> of the current year.

[A.A.C. R18-2-309.2.a]

- **B.** The compliance certifications shall include the following:
  - 1. Identification of each term or condition of the permit that is the basis of the certification;

[A.A.C. R18-2-309.2.c.i]

- 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; [A.A.C. R18-2-309.2c.ii]
- 3. 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.B.2. The certifications shall identify each deviation and take it into account for consideration in the compliance certification; [A.A.C. R18-2-309.2c.iii]
- 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;

[A.A.C. R18-2-309.2c.iii]

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

[A.A.C. R18-2-309.2.c.iv]

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

  [A.A.C. R18-2-309.2.d]
- **D.** If any outstanding compliance schedule exists, a progress report shall be submitted with the semiannual compliance certifications required in Condition VII.A. The progress reports shall contain the information required by A.A.C R18-2-309.5.d.

[A.A.C. R18-2-309.5.d]

#### VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

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.

[A.A.C. R18-2-309.3]

#### IX. INSPECTION AND ENTRY

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

- Enter upon the Permittee's premises where a source is located, emissions-related activity A. is conducted, or where records are required to be kept under the conditions of the permit; [A.A.C. R18-2-309.4.a]
- В. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

[A.A.C. R18-2-309.4.b]

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

[A.A.C. R18-2-309.4.c]

D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and [A.A.C. R18-2-309.4.d]

Record any inspection by use of written, electronic, magnetic and photographic media. Ε. [A.A.C. R18-2-309.4.e]

#### X. ACCIDENTAL RELEASE PROGRAM

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.

[40 CFR Part 68]

#### XI. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. **Excess Emissions Reporting** 

[A.A.C. R18-2-310.01.A, B and C]

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

[A.A.C. R18-2-310.01.A]

- Notification by telephone or facsimile within 24 hours of the time (1) when the Permittee first learned of the occurrence of excess emissions including all available information from Condition XI.A.1.a(2).
- (2) Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XI.A.1.a(1).



- b. The report shall contain the following information:
  - (1) Identity of each stack or other emission point where the excess emissions occurred;

[A.A.C. R18-2-310.01.B.1]

(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:

[A.A.C. R18-2-310.01.B.2]

- (3) Time and duration, or expected duration, of the excess emissions; [A.A.C. R18-2-310.01.B.3]
- (4) Identity of the equipment from which the excess emissions emanated:

[A.A.C. R18-2-310.01.B.4]

(5) Nature and cause of such emissions;

[A.A.C. R18-2-310.01.B.5]

(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;

[A.A.C. R18-2-310.01.B.6]

(7) Steps that were or are being taken to limit the excess emissions; and

[A.A.C. R18-2-310.01.B.7]

(8) If the excess emissions resulted from startup or malfunction, the report shall contain a list of the steps taken to comply with any permit procedures governing source operation during periods of startup or malfunction.

[A.A.C. R18-2-310.01.B.8]

2. In the case of continuous or recurring excess emissions, the notification requirements 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 XI.A.1 above.

[A.A.C. R18-2-310.01.C]

#### **B.** Permit Deviations Reporting

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. Where the applicable requirement contains a definition of prompt or otherwise specifies a timeframe for reporting deviations, that definition or timeframe shall govern. Where the applicable requirement does not address the timeframe for reporting deviations, the Permittee shall submit reports of deviations according to the following schedule:



1. Notice that complies with Condition XI.A.1 is prompt for deviations that constitute excess emissions;

[A.A.C. R18-2-306.A.5.b.i]

2. Notice that is submitted within two (2) working days of discovery of the deviation is prompt for deviations of permit conditions identified by Condition I.E of Attachment "B";

[A.A.C. R18-2-306.A.5.b.ii]

1. Except as provided in Conditions XI.B.1 and 2, prompt notification of all other types of deviations shall be every six (6) months, concurrent with the semiannual compliance certifications required in Section VII, and can be submitted via myDEQ, the Arizona Department of Environmental Quality's online portal.

[A.A.C. R18-2-306.A.5.b.ii]

# C. Emergency Provision

1. An "emergency" means any situation arising from sudden and reasonably 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.

[A.A.C. R18-2-306.E.1]

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

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

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

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

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

[A.A.C. R18-2-306.E.3.a]

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

 $[A.A.C.\,R18\text{-}2\text{-}306.E.3.b]$ 

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

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

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.

 $[A.A.C.\,R18\text{-}2\text{-}306.E.3.d]$ 



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

[A.A.C. R18-2-306.E.4]

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

[A.A.C. R18-2-306.E.5]

#### **D.** Compliance Schedule

For any excess emission or permit deviation that cannot be corrected within 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.

[ARS § 49-426.I.3]

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

A.A.C. R18-2-310 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;

[A.A.C. R18-2-310.A.1]

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

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

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

[A.A.C. R18-2-310.A.3]

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

[A.A.C. R18-2-310.A.4]

e. Included in a permit to meet the requirements of A.A.C. R18-2-406.A.5. [A.A.C. R18-2-310.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.A.C. R18-2-310.B]

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;



[A.A.C. R18-2-310.B.1]

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;

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

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;

[A.A.C. R18-2-310.B.3]

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;

[A.A.C. R18-2-310.B.4]

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

[A.A.C. R18-2-310.B.5]

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

[A.A.C. R18-2-310.B.6]

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;

[A.A.C. R18-2-310.B.7]

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;

[A.A.C. R18-2-310.B.8]

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

[A.A.C. R18-2-310.B.9]

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

[A.A.C. R18-2-310.B.10]

#### 3. Affirmative Defense for Startup and Shutdown

a. Except as provided in Condition XI.E.3.b, 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:

[A.A.C. R18-2-310.C.1]

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

[A.A.C. R18-2-310.C.1.a]

(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;

[A.A.C. R18-2-310.C.1.b]

(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;

[A.A.C. R18-2-310.C.1.c]

(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;

[A.A.C. R18-2-310.C.1.d]

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

[A.A.C. R18-2-310.C.1.e]

(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;

[A.A.C. R18-2-310.C.1.f]

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

[A.A.C. R18-2-310.C.1.g]

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

[A.A.C. R18-2-310.C.1.h]

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 XI.E.2.

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

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 XI.E.2.

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

5. Demonstration of Reasonable and Practicable Measures



For an affirmative defense under Condition XI.E.2 or XI.E.3, the Permittee shall demonstrate, through submission of the data and information required by this Condition XI.E and Condition XI.A.1, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of the excess emissions.

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

# XII. RECORDKEEPING REQUIREMENTS

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

[A.A.C. R18-2-306.A.4.a]

- 1. The date, place as defined in the permit, and time of sampling or measurements; [A.A.C. R18-2-306.A.4.a.i]
- 2. The date(s) any analyses were performed;

[A.A.C. R18-2-306.A.4.a.ii]

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

[A.A.C. R18-2-306.A.4.a.iii]

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

[A.A.C. R18-2-306.A.4.a.iv]

5. The results of analyses; and

[A.A.C. R18-2-306.A.4.a.v]

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

  [A.A.C. R18-2-306.A.4.a.vi]
- B. The Permittee shall retain records of all required monitoring data and support information for a period of at least five (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.

[A.A.C. R18-2-306.A.4.b]

#### XIII. DUTY TO PROVIDE INFORMATION

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.

[A.A.C. R18-2-304.G and -306.A.8.e]

**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.

[A.A.C. R18-2-304.H]



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

**A.** Administrative Permit Amendment;

[A.A.C. R18-2-318]

**B.** Minor Permit Revision; and

[A.A.C. R18-2-319]

C. Significant Permit Revision.

[A.A.C. R18-2-320]

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

#### XV. FACILITY CHANGE WITHOUT A PERMIT REVISION

- **A.** The Permittee may make changes that contravene an express permit term 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(24);

[A.A.C. R18-2-317.A.1]

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;

[A.A.C. R18-2-317.A.2]

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

[A.A.C. R18-2-317.A.3]

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

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

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; and

[A.A.C. R18-2-317.A.5]

6. The changes do not constitute a minor NSR modification.

[A.A.C. R18-2-317.A.6]

**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 XV.A, C, and D of this Attachment.

[A.A.C. R18-2-317.B]

C. For each change under Conditions XV.A and XV.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.

[A.A.C. R18-2-317.D]

- **D.** Each notification shall include:
  - 1. When the proposed change will occur;

[A.A.C. R18-2-317.E.1]

2. A description of the change;

[A.A.C. R18-2-317.E.2]

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

[A.A.C. R18-2-317.E.3]

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

  [A.A.C. R18-2-317.E.7]
- E. The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section XV.

[A.A.C. R18-2-317.F]

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 XV.

[A.A.C. R18-2-317.G]

G. Notwithstanding any other part of Section XV, 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 Section XV over the term of the permit, do not satisfy Condition XV.A.

[A.A.C. R18-2-317.H]

#### XVI. TESTING REQUIREMENTS

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

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

**B.** Operational Conditions During Performance Testing

Performance tests shall be conducted under such conditions as the Director shall specify to the plant operator based on representative performance of the source. The Permittee shall make available to the Director such records as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.

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

C. Performance 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.

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

D. Test Plan



At least 14 working days prior to performing a test, the Permittee shall submit a test plan to the Director, which must include the following, in addition to all other applicable requirements, as identified in the Arizona Testing Manual:

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

- 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:

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

- 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 (3) 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 (3) runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three (3) 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.

[A.A.C. R18-2-306.A.3.c and A.A.C. R18-2-312.F]

#### **G.** Report of Final Test Results

A written report of the results of performance tests conducted pursuant to 40 CFR 63, shall be submitted to the Director within 60 days after the test is performed. A written report of the results of all other performance tests shall be submitted within 4 weeks after the completion of the testing as specified in the Arizona Testing Manual. All performance



testing reports shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

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

#### **H.** Extension of Performance Test Deadline

For performance testing required under Condition XVI.A, the Permittee may request an extension to a performance test deadline due to a force majeure event as follows:

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

1. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Director in writing as soon as practicable following the date the Permittee first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline. The notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall be given as soon as practicable.

[A.A.C. R18-2-312.J.1]

2. The Permittee shall provide to the Director a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the Permittee proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure event occurs.

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

3. The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Director. The Director shall notify the Permittee in writing of approval or disapproval of the request for an extension as soon as practicable.

[A.A.C. R18-2-312.J.3]

4. Until an extension of the performance test deadline has been approved by the Director under Conditions XVI.H.1, 2, and 3, the Permittee remains subject to the requirements of Section XVI.

[A.A.C. R18-2-312.J.4]

5. For purposes of this Section XVI, a "force majeure event" means an event that will be or has been caused by circumstances beyond the control of the Permittee, its contractors, or any entity controlled by the Permittee that prevents it from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the Permittee's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the Permittee.

[A.A.C. R18-2-312.J.5]

#### XVII. PROPERTY RIGHTS

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

[Â.A.C. R18-2-306.A.8.d]



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.

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

#### XIX. PERMIT SHIELD

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 XIV.B of this Attachment and any facility changes without a permit revision pursuant to Condition XV of this Attachment.

[A.A.C. R18-2-317.F, - 320, and -325]

#### XX. PROTECTION OF STRATOSPHERIC OZONE

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

[40 CFR Part 82]

#### XXI. APPLICABILITY OF NSPS / NESHAP GENERAL PROVISIONS

For all equipment subject to a New Source Performance Standard or a National Emission Standard for Hazardous Air Pollutants, the Permittee shall comply with all applicable requirements contained in Subpart A of Title 40, Chapter 60 and Chapter 63 of the Code of Federal Regulations.

[40 CFR Part 60 Subpart A and Part 63 Subpart A]



#### ATTACHMENT "B": SPECIFIC CONDITIONS

# I. FACILITY-WIDE REQUIREMENTS

### **A.** Applicability

This Section is applicable to all facility-wide equipment.

#### **B.** Operational Requirement

1. The Permittee shall operate all equipment identified in Attachment "D" in accordance with vendor-supplied operation and maintenance instructions. If vendor-supplied operation 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 equipment in good working order. In the absence of vendor-supplied operation 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]

#### 2. Recordkeeping Requirements

- a. 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.3.c]
- b. 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]

c. 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]

# C. Opacity

- 1. Instantaneous Surveys and Six-Minute Observations
  - a. Instantaneous Surveys

Any instantaneous survey required by this permit shall be determined by either option listed in Conditions I.C.1.a(1) and I.C.1.a(2):

[A.A.C. R18-2-311.b]

- (1) Alternative Method ALT-082 (Digital Camera Operating Technique)
  - (a) The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.
  - (b) The results of all instantaneous surveys and six-minute observations shall be obtained within 30 minutes.



(2) EPA Reference Method 9 Certified Observer.

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

b. Six-Minute Observations

Any six-minute observation required by this permit shall be determined by either option listed in Conditions I.C.1.b(1) and I.C.1.b(2):

[A.A.C. R18-2-311.b]

- (1) Alternative Method ALT-082 (Digital Camera Operating Technique)
  - (a) The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.
  - (b) The results of all instantaneous surveys and six-minute observations shall be obtained within 30 minutes.
- (2) EPA Reference Method 9.
- c. The Permittee shall have on site or on call a person certified in EPA Reference Method 9 unless all six-minute Method 9 observations required by this permit are conducted as a six-minute Alternative Method ALT-082 (Digital Camera Operating Technique) and all instantaneous visual surveys required by this permit are conducted as an instantaneous ALT-082 camera survey. Any six-minute Method 9 observation required by this permit can be conducted as a six-minute Alternative Method ALT-082 and any instantaneous visual survey required by this permit can be conducted as an instantaneous ALT-082 camera survey.

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

2. Monitoring, Recordkeeping and Reporting Requirements

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

- a. At the frequency specified in the following sections of this permit, the Permittee shall conduct an instantaneous survey of visible emissions from both process stack sources, when in operation, and fugitive dust sources.
- b. If the visible emissions on an instantaneous basis appears less than or equal to the applicable opacity standard, then the Permittee shall keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.
- c. If the visible emissions on an instantaneous basis appears greater than the applicable opacity standard, then the Permittee shall immediately conduct a six-minute observation of the visible emissions.
  - (1) If the six-minute observation of the visible emissions is less than or equal to the applicable opacity standard, then the Permittee shall record the name of the observer, the date on which the six-minute observation was made, and the results of the six-minute observation.



- (2) If the six-minute observation of the visible emissions is greater than the applicable opacity standard, then the Permittee shall do the following:
  - (a) Adjust or repair the controls or equipment to reduce opacity to less than or equal to the opacity standard;
  - (b) Record the name of the observer, the date on which the six-minute observation was made, the results of the six-minute observation, and all corrective action taken; and
  - (c) Report the event as an excess emission for opacity in accordance with Condition XI.A of Attachment "A".
  - (d) Conduct another six-minute observation to document the effectiveness of the adjustments or repairs completed.
- **D.** 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

Upon detecting an excursion or exceedance, the Permittee shall restore a. 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)]

- 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 Section VII of Attachment "A" of this permit. The compliance certification 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)]

# **E.** Reporting Requirements

Deviations from the following Attachment "B" permit conditions shall be promptly reported in accordance with Condition XI.B.2 of Attachment "A":

[A.A.C. R18-2-306.A.5.b]

- 1. Condition II.E.1.a;
- 2. Condition II.F.2.d; and
- 3. Conditions IV.C.1, IV.C.2 and IV.C.3

# II. FINISHING OPERATIONS REQUIREMENTS

#### **A.** Applicability

This Section is applicable to each piece of equipment identified (except as noted in the last sentence of this Condition) in Attachment "D" under the following headings: Finishing Line 1 (Main Line), Finishing Line 3 (Expedite Line), Finishing Line 4 (Hybrid Line),



Pump Room and Test Spray Booth and Regenerative Thermal Oxidizer (RTO-1).

#### **B.** Operational Limitation

The Permittee shall not operate the finishing material test booth for more than 416 hours in any rolling 12-month period.

[A.A.C. R18-2-306.01.A and R18-2-331.A.3.a]

[Material Permit Conditions are indicated by italics and underlines]

#### C. Recordkeeping Requirement

The Permittee shall maintain a 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]

#### **D.** Particulate Matter and Opacity

1. Emission Limitation and Standard

The Permittee shall not cause, allow or permit visible emissions from finishing operations in excess of 20% opacity.

[A.A.C. R18-2-702.B.3]

# 2. Monitoring Requirement

A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions emanating from the RTO-1 when in operation and in accordance with Condition I.C of this Attachment.

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

#### 3. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with A.A.C.R18-2-702.B.3.

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

# E. Volatile Organic Compounds (VOCs)

- 1. Emission Limitations and Standards
  - a. <u>Total VOC emissions from finishing lines 1 and 4 shall not exceed 167</u> tons per year, calculated on a 12-month rolling basis.

[A.A.C. R18-2-306.01.A and R18-2-331.A.3.a]

[Material Permit Conditions indicated by italics and underlines]

b. <u>Total VOC emissions from manual finishing operations (finishing line 3)</u> shall not exceed 59.6 tons per year, calculated on rolling 12-month basis.

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

# 2. Air Pollution Control Requirements

a. <u>The Permittee shall maintain and operate a VOC capture system and a regenerative thermal oxidizer (RTO-1) in accordance with manufacturer's specifications and consistent with good air pollution control practices for</u>



the capture and control of 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, including during trolley belt cleaning and nightly cleaning operations.

(1) Finishing Line 1:

M4a, M4b, M7, M13a, M13b, M14, M16a, M16b, M21, M26a, M26b, M28a, M28b, M28c, M33a, M33b, M35a, M35b, M35c, M40a, M40b, M42a, M42b, M42c, M50a, M50b, M52a, M52b, M52c, Trolley Belt Cleaning and Nightly Cleaning Operations.

(2) Finishing Line 4:

<u>H29a, H29b, H32, H34, H36a, H36b, H41a, H41b, H43a, H43b, H43c, H48a, H48b, H50a, H50b, H50c, Trolley Belt Cleaning and Nightly Cleaning Operations.</u>

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

b. <u>Each spray booth shall be equipped with an enclosure and dry filter system</u> to contain no less than 96% of the overspray.

[A.A.C. R18-2-727.A, R18-2-306.01.A and R18-2-331.A.3.d and e] [Material Permit Conditions indicated by italics and underlines]

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

d. <u>The VOC capture system shall be operated to achieve a minimum capture</u> efficiency of 90% 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 underlines]

e. <u>The regenerative thermal oxidizer (RTO-1) shall be operated to achieve a minimum VOC destruction efficiency of 95% by weight.</u>

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

- 3. Monitoring, Recordkeeping and Reporting Requirements
  - a. The Permittee shall perform a daily inspection to verify the integrity and particle loading of the spray booth dry filters.

[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 four (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.3.c]

d. The Permittee shall maintain 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 as applied in each finishing line in accordance with Condition II.F.6.b of this Attachment. Supporting records used to develop the accounting, including purchase orders, invoices, and safety data sheets (SDS) 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]

e. The Permittee shall maintain 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 waste profile(s) 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.3.c]

- f. The Permittee shall use the monthly usage records for each line from Conditions II.E.3.d and II.E.3.e of this Attachment and the VOC capture efficiency and regenerative thermal oxidizer (RTO-1) destruction efficiency for Lines 1 and 4 based on the most recent, approved performance test results conducted in accordance with Condition II.E.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 12-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 the 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.E.1.a and II.E.1.b of this Attachment.

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

i. Each individual month and 12-month rolling total VOC emissions in the reporting period shall be included in the semiannual compliance certification required by Section VII of Attachment "A".

[A.A.C. R18-2-306.A.5.a]

j. Bypass Damper Operation



(1) 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.e] [Material Permit Conditions indicated by italics and underlines]

(2) The Permittee shall take corrective action within four (4) 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.2]

- (3) 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) Function and range of motion of damper;
  - (b) Condition of the damper closure seal; and
  - (c) Integrity of the indicator.

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

- k. Regenerative Thermal Oxidizer (RTO-1) Inspection
  - (1) The Permittee shall perform a functional inspection of RTO-1 at least once per operating day for Lines 1 and 4. The functional inspection shall include observation of the combustion chamber temperature monitoring system output and verification of normal operation of RTO-1 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]

(2) The Permittee shall perform an inspection and maintenance of the RTO-1 burner at least once per year. A record of each annual RTO-1 burner inspection and all RTO-1 maintenance shall be maintained on site readily available to ADEQ upon request.

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

(3) The Permittee shall take corrective action following the discovery of any abnormal operation of 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



(1) The Permittee shall monitor static pressure on each Finishing Line 1 and 4 VOC capture module and at the common exhaust duct at the inlet to the regenerative thermal oxidizer (RTO-1).

[40 CFR 64.6(c)(1)(i)]

(2) The Permittee shall monitor the outlet temperature of the regenerative thermal oxidizer (RTO-1) combustion chamber.

[40 CFR 64.6(c)(1)(i)]

(3) The Permittee shall monitor the pressure differential of the finishing room building enclosure.

[40 CFR 64.6(c)(1)(i)]

- b. Monitoring Approach
  - (1) Exhaust Duct and RTO Inlet Static Pressure
    - (a) The Permittee shall operate and maintain a continuous static pressure monitoring device on each VOC capture 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. R18-2-306.A.3.c and 40 CFR 64.6(c)(1)(i),-(ii), -(iii) and -64.7(a) and (b)]

(b) The Permittee shall observe and record the readings from the static pressure monitoring device of each VOC capture module 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)]

(c) The static pressure at regenerative thermal oxidizer (RTO-1) 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)]

(2) Regenerative Thermal Oxidizer (RTO-1) 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-1 combustion chamber 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. R18-2-306.A.3.c and 40 CFR 64.6(c)(1)(i), -(ii), -(iii) and 64.7(a) and (b)]

- (3) Building Enclosure Differential Pressure
  - (a) <u>The Permittee shall install,</u> operate, and maintain <u>a</u> <u>continuous differential pressure monitoring system on the building enclosure.</u> The differential pressure monitoring



system shall be a minimum of four (4) monitors, one on each of the four (4) walls of the enclosure.

[A.A.C. R18-2-331.A.3.c and 40 CFR 64.6(c)(1)(i), -(ii), -(iii) and 64.7(a) and (b)] [Material Permit Conditions indicated by italics and underlines]

(b) The differential pressure monitoring system shall be operated at all times when VOC containing materials are being processed in the controlled finishing lines, including during cleaning operations.

[40 CFR 64.7(c)]

(c) The Permittee shall install an automated data collection system to monitor and record the differential pressure reading of each monitor once per minute. The measurement from each monitor shall be averaged to obtain a 1-minute average measurement for all monitors. 15-minute rolling average values shall be determined by adding the current 1-minute average measurement to the total of the previous fourteen (14) 1-minute average measurements.

[40 CFR 64.9(b)]

#### c. Excursion Determination

(1) Exhaust Duct and Regenerative Thermal Oxidizer (RTO-1) Inlet Static Pressure

[40 CFR 64.6(c)(2)]

- (a) Each positive static pressure reading at any VOC capture system monitoring location shall constitute an excursion.
- (b) Each period longer than 15 consecutive minutes during which the regenerative thermal oxidizer inlet static pressure is greater than -3.5 inches of water (i.e., a negative pressure that is not at least -3.5 inches of water) shall constitute an excursion.
- (2) 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 degrees Fahrenheit shall constitute an excursion.

[40 CFR 64.6(c)(2)]

(3) Building Enclosure Differential Pressure

Each rolling 15-minute average value that is greater than -0.007 inches of water (i.e., a negative pressure that is not at least -0.007 inches of water) shall constitute an excursion.

[A.A.C. R18-2-311 and A.A.C. R18-2-312]

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



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

### 5. Testing Requirements

[A.A.C. R18-2-311 and A.A.C. R18-2-312]

- a. The Permittee shall perform a performance test for the destruction efficiency of the Finishing Lines 1 and 4 VOC control system in the second and fourth years of the permit term.
- b. The Permittee shall perform a performance test for the capture efficiency of the Finishing Lines 1 and 4 VOC control system during the fourth year of the permit term. This test must be performed concurrent with the destruction efficiency test required under the Condition above.
- c. If at any time, the 12-month rolling total of VOC emission rate for Finishing Lines 1 and 4 exceeds 80% of the VOC emission limit contained in Condition II.E.1.a of this Attachment, the Permittee shall increase:
  - (1) The frequency of compliance tests for the destruction efficiency of Finishing Lines 1 and 4 VOC control system to annually.
  - (2) The frequency of compliance tests for the capture efficiency of Finishing Lines 1 and 4 VOC control system to every other destruction efficiency test.
- d. If the Permittee chooses to demonstrate compliance with the VHAP emission limits of Attachment "B", Condition II.E.1.b in accordance with Attachment "B," Condition II.F.4.a(3) through performance testing conducted concurrent with the requirements of Attachment "B", Conditions II.E.5.a and II.E.5.b, the Permittee shall follow the test methods cited in 40 CFR 63.805(c) and the procedures in 40 CFR 63.805 (d) or (e).

[40 CFR 63.805(b)]

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

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

- (1) Preparation and submittal to the Director, a site-specific test plan. The test plan shall be submitted no later than 14 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. The test plan for capture efficiency testing shall specify the operating conditions for all evaporative coolers and forced air heating units that represent the worst-case representative operating/VOC venting scenario in the building enclosure.
- (2) Notification to the Director at least 14 days prior to the proposed date for commencing the performance test.
- (3) 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.



- (4) Three (3) 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.
- (5) Alternative methods or deviations from accepted US EPA Reference Methods shall be subject to approval by the Director.
- f. 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 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.

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

g. The VOC control efficiency of the RTO shall be determined using the applicable procedures and U.S. EPA test methods in 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)]

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

h. The product of the capture and control efficiency determined in accordance with Conditions II.E.5.f and II.E.5.g shall define the overall control efficiency of each VOC capture and control system.

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

i. During each performance test, the Permittee shall record the readings from each VOC module enclosure static pressure monitoring system, the 15-minute average building enclosure differential pressure and the regenerative thermal oxidizer (RTO-1) inlet pressure.

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

j. 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).

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

#### 6. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with A.A.C. R18-2-727.A and 40 CFR 63.805(b).

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

#### **F.** Hazardous Air Pollutants (HAPs)

#### 1. General Provisions

This Subsection is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A for General Provisions, according



to the applicability of Subpart A as identified in Table 1 of 40 CFR Part 63 Subpart JJ for Wood Furniture Manufacturing Operations.

[40 CFR 63.800(e)]

- 2. Emission Limitations for Volatile Hazardous Air Pollutants (VHAP)
  - a. Volatile Hazardous Air Pollutant (VHAP) means any chemical listed in Table 2 of 40 CFR 63 Subpart JJ.

[40 CFR 63.801(a)]

- b. The Permittee shall not exceed the following VHAP emission limits: [40 CFR 63.802(b)(1) and Table 3 of 40 CFR Subpart JJ]
  - (1) Achieve a weighted average VHAP content of 0.8 lb VHAP/lb solids across all coatings as applied.
    - (a) For formaldehyde, the VHAP content shall be based on the amount of free formaldehyde present in the finishing material when it is applied.

[40 CFR 63.802(b)(1) and -(803)(1)(2)]

- (b) For styrene, the VHAP content shall be calculated by multiplying the amount of styrene monomer in the finishing material when it is applied by a factor of 0.16.

  [40 CFR 63.802(b)(1) and -(803)(l)(2)]
- (2) Or, use compliant finishing materials with maximum VHAP content per the following:
  - (a) Stains 1.0 lb VHAP/lb solids, as applied.
  - (b) Sealers and topcoats 0.8 lb VHAP/lb solids, as applied.
  - (c) Wash coats, basecoats and enamels:
    - (i) Not formulated onsite, 0.8 lb VHAP/lb solids, as applied.

[40 CFR 63.804(d)(2)(ii)]

(ii) Formulated onsite – using a finishing material containing no more than 0.8 lb VHAP/lb solids, and thinner(s) containing no more than 3.0 percent VHAP by weight.

[40 CFR 63.804(d)(2)(iii)]

(d) 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;

[40 CFR 63.804(d)(2)(i), -(ii) and (iii)]

Or, use a control system with a control efficiency as specified in Condition II.F.4.a(3) of this Attachment.

[40 CFR 63.804.d(3)



(4) Or, use a combination of (1), (2) and (3) above.

[40 CFR 63.804(d)(4)]

c. Emission Limits for Formaldehyde

The Permittee shall limit formaldehyde emissions by complying with either Condition II.F.2.c(1) or II.F.2.c(2).

[40 CFR 63.802(b)(4)]

(1) Limit total formaldehyde  $(F_{total})$  use in coatings to no more than 400 pounds per rolling 12-month period.

[40 CFR 63.802(b)(4)(i)]

(2) Use coatings only if they are low-formaldehyde, where low-formaldehyde means in the context of a coating, a product concentration of less than or equal to 1.0% formaldehyde by weight, as described in a certified product data sheet for the material.

[40 CFR 63.801(a) and 802(b)(4)(ii)]

d. The Permittee must at all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.802(c)]

e. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with 40 CFR 63.802(b)(1), -(b)(4) and -(c).

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

- 3. Work Practice Standards
  - a. Work Practice Implementation Plan
    - (1) 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.F.3.b through II.F.3.1 of this Attachment.

[40 CFR 63.803(a)(1)]

(2) 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. Revisions or modifications of



the plan do not require a permit revision.

[40 CFR 63.803(a)(2)]

(3) The inspection and maintenance plan required by Condition II.F.3.c of this Attachment and the formulation assessment plan for finishing operations required by Condition II.F.3.l of this Attachment are also reviewable by the Director.

[40 CFR 63.803(a)(3)]

#### 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 Condition II.F. 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:

- (1) A list of all current personnel, by name and job description, those are required to be trained;
- (2) An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
- (3) 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
- (4) 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:

- (1) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings or organic HAP solvents;
- (2) An inspection schedule;
- (3) Methods for documenting the date and results of each inspection and any repairs that were made;



- (4) The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
  - (a) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five (5) calendar days after the leak is detected; and
  - (b) 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:

- (1) 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;
- (2) The number of pieces washed off, and the reason for the washoff; and
- (3) 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

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 SDS reporting as required by OSHA.

[40 CFR 63.803(e)]

# f. Spray Booth Cleaning

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.

[40 CFR 63.803(f)]

# g. Storage Requirements

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



[40 CFR 63.803(g)]

### h. Application Equipment Requirements

The Permittee shall not use conventional air spray guns except when all emissions from the finishing application station are routed to a functional control device.

[40 CFR 63.803(h)]

# i. Line Cleaning

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

[40 CFR 63.803(i)]

# j. Gun Cleaning

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

[40 CFR 63.803(j)]

#### k. Washoff Operations

[40 CFR 63.803(k)]

The Permittee shall control emissions from washoff operations by:

- (1) Using normally closed tanks for washoff; and
- (2) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.

# 1. Formulation Assessment Plan for Finishing Operations

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

[40 CFR 63.803(l)]

(1) 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 SDS 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 Permittee 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 Permittee from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:

[40 CFR 63.803(l)(6)]

(a) The exceedance is no more than 15% above the de



minimis level;

[40 CFR 63.803(l)(4)(i)]

(b) Usage of the VHAP is below the de minimis level presented in Table 5 to Subpart JJ of 40 CFR Part 63 for that VHAP (if a control device is used to reduce emissions of the VHAP identified in Condition II.F.3.l(1), the Permittee may adjust their usage based on the overall control efficiency of the control system, which is determined using the procedures in Condition II.F.4.b of this Attachment;

[40 CFR 63.803(1)(4)(ii)]

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

  [40 CFR 63.803(I)(4)(iii)]
- (d) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 lb VOC/lb solids, as applied.

[40 CFR 63.803(l)(4)(iv)]

(2) 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 needs 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.

[40 CFR 63.803(1)(5)]

#### m. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with 40 CFR 63.803(a), -(b), -(c), -(d), -(e), -(f), -(g), -(h), -(i), -(j), -(k), -(l)(4), -(l)(5) and -(l)(6).

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

- 4. Compliance Procedures and Monitoring Requirements.
  - a. The Permittee shall demonstrate compliance with the VHAP emission limits of Condition II.F.2.b of this Attachment by the corresponding method(s) listed below:
    - (1) 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.

[40 CFR 63.801 and 804(d)(1)]

## Equation 1:

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

Where:

Cc = the VHAP content of a finishing material (c), in lb VHAP / lb solids as supplied;

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

M = the mass of solids in finishing material (c) used monthly, 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 pounds, added to finishing materials during the monthly averaging period.

(2) Or, use compliant finishing materials according to the following criteria.

[40 CFR 63.804(d)(2)]

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

[40 CFR 63.804(d)(2)(i)]

(b) 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 lb VHAP/lb solids, as applied, and each thinner contains no more than 10.0% VHAP by weight; and

[40 CFR 63.804(d)(2)(ii)]

(c) Demonstrate that each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 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)]

(3) Or, use a control system with an overall control efficiency (R) such that the value of  $E_{ac}$  in Equation 4 is no greater than 0.8. The value of  $E_{bc}$  in Equation 4 shall be calculated using Equation 1, as



specified in Condition II.F.4.a(1).

[40 CFR 63.801 and .804(d)(3)]

Equation 4:

$$R = [(E_{bc} - E_{ac})/E_{bc}](100)$$

Where:

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

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

(4) Or, use any combination of an averaging approach, as described in Condition II.F.4.a(1), compliant finishing materials, as described in Condition II.F.4.a(2), and a control system, as described in Condition II.F.4.a(3).

[40 CFR 63.804(d)(4)]

b. The Permittee shall demonstrate compliance with the formaldehyde emission limits of Condition II.F.2.c(1) by using either the method in Condition II.F.4.a(1) or II.F.4.a(2), or demonstrate compliance with the formaldehyde emission limits of Condition II.F.2.c(2) by using the method in Condition II.F.4.b(3).

[40 CFR 63.804(h)]

(1) Calculate total formaldehyde emissions from all finishing materials used at the facility using Equation 5 and maintain a value of  $F_{total}$  no more than 400 pounds per rolling 12-month period.

[40 CFR 63.801 and 804.(h)(1)]

Equation 5

$$F_{\text{total}} = (C_{\text{fl}} V_{\text{cl}} + C_{\text{fl}} V_{\text{c2}} + *** + C_{\text{fn}} V_{\text{cn}})$$

Where:

 $C_f$  = the formaldehyde content of a finishing material (C) , in pounds of formaldehyde per gallon of coating (lb/gal)

 $F_{total}$  = total formaldehyde emissions in each 12-month period

 $V_c$  = the volume of formaldehyde-containing finishing material (c), in gallons.

(2) Use a control system with an overall control efficiency (R) such that the calculated value of F<sub>total</sub> in Equation 6 is no more than 400 pounds per rolling 12-month period.

[40 CFR 63.801 and 804(h)(2)]



$$F_{\text{total}} = (C_{\text{fl}} V_{\text{c1}} + C_{\text{f2}} V_{\text{c2}} + *** + C_{\text{fn}} V_{\text{cn}}) x (1-R)$$

Where:

 $C_f$  = the formaldehyde content of a finishing material (C), in pounds of formaldehyde per gallon of coating (lb/gal)

 $F_{total}$  = total formaldehyde emissions in each 12-month period

R = the overall efficiency of the control system, expressed as a percentage

 $V_c$  = the volume of formaldehyde-containing finishing material (c), in gallons.

(3) Use coatings only if they are low-formaldehyde coatings maintaining a certified product data sheet for each coating used, as required by Condition II.F.6.b(1), and submitting a compliance certification with the semiannual report required by Condition II.F.6.b. The compliance certification shall state that low-formaldehyde coatings have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. The Permittee is in violation of the standard whenever a coating that is not low-formaldehyde, as demonstrated 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.

[63.804(h)(3)]

## c. Continuous compliance demonstrations

(1) If the Permittee chooses to comply with the Condition II.F.2.b of this Attachment through the procedures established in Condition II.F.4.a(1), 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.F.6.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)]

(2) If the Permittee chooses to comply with the Condition II.F.2.b of this Attachment through the procedures established in Condition II.F.4.a(2), 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.F.6.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. The Permittee 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)]

(3) If the Permittee chooses to comply with the Condition II.F.2.b of this Attachment through the procedures established in Condition II.F.4.a(2) and is applying coatings using continuous coaters, the Permittee shall demonstrate continuous compliance by following either of the following procedures.

[40 CFR 63.804(g)(3)]

(a) 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.F.6.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.

[40 CFR 63.804(g)(3)(i)]

(b) 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.F.6.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. 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.F.4.a(2), as determined using EPA Method 311, or the viscosity of



the coating in the reservoir is less than the viscosity of the initial coating.

[40 CFR 63.804(g)(3)(ii)]

(4) If the Permittee chooses to comply with the Condition II.F.2.b of this Attachment through the procedures established in Condition II.F.4.a(3), the Permittee shall demonstrate continuous compliance by installing, 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.F.6.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)]

(5) For the purpose of demonstrating compliance with the work practice standards in Section II.F.3 of this Attachment, the Permittee shall submit a compliance certification with the semiannual report required by Condition II.F.6.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)]

(6) The Permittee shall demonstrate continuous compliance with the emissions standards and operating limits by using the performance test methods and procedures in Condition II.F.5 for each affected source.

[40 CFR 63.804.(g)(9)]

- (a) The Permittee shall monitor and collect data, and provide a site-specific monitoring plan as required by 40 CFR 63.804, -805 and 806.
- (b) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall operate the monitoring system and collect data at all required intervals at all times the affected source is operating and periods of



malfunction. Any period for which data collection is required and the operation of the monitoring system is not otherwise exempt and for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

- (c) The Permittee may not use data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system.
- (7) All the compliance certifications shall be signed by a responsible official of the company that owns or operates the affected source.

  [A.A.C. R18-2-304.H, 40 CFR 63.804(g)]

#### d. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with 40 CFR 63.804(d), -(g) and -(h).

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

#### 5. Performance Test Methods

The EPA Method 311 of appendix A of part 63 shall be used in conjunction a. 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, the Permittee can demonstrate to the satisfaction of the Director 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). Performance tests shall be conducted under such conditions as the Director specifies to the Permittee based on representative performance of the affected source for the period being tested. Upon request, the Permittee shall make available to the Director such records as may be necessary to determine the conditions of performance tests.

[40 CFR 63.805(a)]

b. If the Permittee chooses to demonstrate compliance with the VHAP emission limits of Condition II.F.2.b in accordance with Condition II.F.4.a(3) by operating a capture or control device, the Permittee 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 40 CFR 63.805(c) and the procedures in 40 CFR 63.805 (d) or (e). [40 CFR 63.805(b)]

#### c. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with 40 CFR 63.805(a), -(b), -(c) and -(d) or -(e) as applicable.

## 6. Recordkeeping Requirements

a. The Permittee shall fulfill all recordkeeping requirements of 40 CFR 63.10, 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)]

- (1) A certified product data sheet for each finishing material and thinner subject to the emission limits in Condition II.F.2; and
- (2) The VHAP content, in lb VHAP/lb solids, as applied, of each finishing material subject to the emission limits in Condition II.F.2; and
- (3) The formaldehyde content, in lb/gal, as applied, of each finishing material subject to the emission limit in Condition II.F.2.c(1).
- c. The Permittee following the compliance method in Condition II.F.4.a(1) 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.F.4.c(3)(b) shall maintain the records required by Condition II.F.6.b as well as records of the following:

[40 CFR 63.806(d)]

(1) Solvent and coating additions to the continuous coater reservoir;



- (2) Viscosity measurements; and
- (3) Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance.
- e. The Permittee subject to the work practice standards in Condition II.F.3 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)]

- (1) Records demonstrating that the operator training program required by Condition II.F.3.b is in place;
- (2) Records collected in accordance with the inspection and maintenance plan required by Condition II.F.3.c;
- (3) Records associated with the cleaning solvent accounting system required by Condition II.F.3.d;
- (4) Records associated with the formulation assessment plan required by Condition II.F.3.l; and
- (5) 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.F.4.c(4) shall maintain copies of the calculations demonstrating that the overall control efficiency (R) of the control system results in the value of  $E_{\rm ac}$  required by Equation 4, records of the operating parameter values, and copies of the semiannual compliance reports required by Condition II.F.6.c.

[40 CFR 63.806(f)]

g. The Permittee subject to the emission limits in Condition II.F.2 and following the compliance provisions under Condition II.F.4.d shall maintain records of the compliance certifications submitted in accordance with Condition II.F.6.b for each semiannual period following the compliance date.

[40 CFR 63.806(h)]

h. The Permittee shall maintain records of all other information submitted with the compliance status report required by 40 CFR 63.10(b)(1), and the semiannual reports required by Condition II.F.6.b.

[40 CFR 63.806(i) and -(j)]

i. The Permittee shall maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control equipment and monitoring equipment. The Permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with Condition II.F.2.d, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of



operation.

[40 CFR 63.806.(k)]

## j. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with 40 CFR 63.806(a) through (f), and –(h) through (k).

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

## 7. Reporting Requirements

a. The Permittee shall fulfill all reporting requirements of 40 CFR 63.7 through 40 CFR 63.10 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.F.4.b and II.F.4.c shall submit a semiannual report covering the previous six (6) months of wood furniture manufacturing operations:

[40 CFR 63.807(c)]

- (1) The semiannual reports shall be submitted 30 calendar days after the end of each 6-month reporting period
- Conditions II.F.4.b and II.F.4.c, 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. If there was a malfunction during the reporting period, the report shall also include the number, duration and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the Permittee during a malfunction of an affected source to minimize emissions in accordance with Condition II.F.2.d, including actions taken to correct a malfunction.
- (3) The frequency of the reports required by Condition II.F.6.b 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.F.4.b(2) and II.F.4.c(4) 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 Condition II.F.4.c(4). 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)]



#### d. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with 40 CFR 63.807(a), -(c) and -(d).

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

## 8. Affirmative Defense

[40 CFR 63.800(j)]

If the Permittee, in accordance with 40 CFR 63.804, uses a control system as a means of limiting emissions, in response to an action to enforce the standards set forth in this subpart, the Permittee may assert an affirmative defense to a claim for civil penalties for exceedances of such standards that are caused by malfunction, as defined in 40 CFR 63.2. Appropriate penalties may be assessed, however, if the respondent fails to meet its burden of proving all the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

- a. To establish the affirmative defense in any action to enforce such a limit, the Permittee must timely meet the notification requirements in Condition II.F.7.b, and must prove by a preponderance of evidence that:
  - (1) The excess emissions:
    - (a) Were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner:
    - (b) Could not have been prevented through careful planning, proper design or better operation and maintenance practices;
    - (c) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and
    - (d) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance.
  - (2) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs;
  - (3) The frequency, amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;
  - (4) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (5) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment, and human



health;

- (6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices;
- (7) All of the actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs;
- (8) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and
- (9) A written root cause analysis has been prepared, the purpose of which is to determine, correct and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

#### b. Notification

The Permittee experiencing an exceedance of its emission limit(s) during a malfunction shall notify the Director by telephone or facsimile (FAX) transmission as soon as possible, but no later than two (2) business days after the initial occurrence of the malfunction, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The Permittee seeking to assert an affirmative defense shall also submit a written report to the Director within 45 days of the initial occurrence of the exceedance of the standard in 40 CFR 63 Subpart JJ to demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in Condition II.F.7.a. The Permittee may seek an extension of this deadline for up to 30 additional days by submitting a written request to the Director before the expiration of the 45-day period. Until a request for an extension has been approved by the Director, the Permittee is subject to the requirement to submit such report within 45 days of the initial occurrence of the exceedance.

#### c. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with 40 CFR 63.800(j).

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

## III. FUEL-BURNING EQUIPMENT REQUIREMENTS

## **A.** Applicability

This Section is applicable to the following equipment identified in the Attachment "D" under Fuel Burning Equipment: Hot Water Heaters (HWH-1, 2 and 3), Co-Ray-Vac Heating System (CRV-1) and Finishing Heaters (FH-1 through FH-18).

## **B.** 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 equipment identified in the Condition above 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 the equipment identified in the Condition above to exceed 15%.

[A.A.C. R18-2-724.J]

- 2. Monitoring, Recordkeeping and Reporting Requirements
  - a. The Permittee shall keep records of fuel supplier certifications or other documentation, containing information regarding the name of the fuel supplier, lower heating value and sulfur content 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 Hot Water Heaters (HWH-1, 2 and 3) and the Co-Ray-Vac Heating System (CRV-1) when in operation and in accordance with Condition I.C of this Attachment.

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

3. Permit Shield

Compliance with the Conditions of this Subsection 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 REQUIREMENTS

## **A.** Applicability

This Section is applicable to woodworking operations (milling, hole-boring, sanding and dusting operations) in the Finishing Line Operations, Assembly and Small Parts Operations and Milling Operations.



## **B.** Particulate Matter and Opacity

1. Emission Limitations and Standards

In any one-hour period, the Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere from Dust Collectors 1, 2 and 3 (BH-1, BH-2 and BH-3) in excess of the amounts calculated by one of the following equations:

a. 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]

b. 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 above.

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

2. 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]

3. The Permittee shall not cause, allow or permit to be emitted into the atmosphere, any plume or effluent, which exceeds 20% opacity.

[A.A.C. R18-2-702.B.3]

## C. Air Pollution Control Requirements

1. <u>The Permittee shall continuously operate</u> and maintain <u>Dust Collector 1 (BH-1) in accordance with manufacturer's specifications and consistent with good air pollution control practices for the control of particulate emissions from panel saws and cutting machines in Milling Operations when any panel saw or cutting machine is in operation.</u>

[A.A.C. R18-2-306.01, A.A.C. R18-2-331.A.3. e] [Material Permit Condition is indicated by italics and underlines]

2. <u>The Permittee shall continuously operate</u> and maintain <u>Dust Collector 2 (BH-2) in accordance with manufacturer's specifications and consistent with good air pollution control practices for the control of particulate emissions from drilling</u>



<u>machines in the Assembly and Small Parts Operation when any drilling machine</u> <u>is in operation</u>.

[A.A.C. R18-2-306.01, A.A.C. R18-2-331.A.3. e]

[Material Permit Condition is indicated by italics and underlines]

3. The Permittee shall continuously operate and maintain <u>Dust Collector 3 (BH-3) in accordance with manufacturer's specifications and consistent with good air pollution control practices for the control of particulate emissions from sanding, panel cleaning and dusting modules on Finishing Lines 1 and 4 when either line is in operation.</u>

[A.A.C. R18-2-306.01, A.A.C. R18-2-331.A.3. e]

[Material Permit Condition is indicated by italics and underlines]

a. Finishing Line 1 Modules Controlled by BH-3:

*M*2, *M*3, *M*10, *M*12, *M*25, *M*37, *M*38, *M*39, *M*46, *M*47, *M*48 and *M*49.

b. Finishing Line 4 Modules Controlled by BH-3:

H26, H28, H38, H39, H40, H46 and H47.

4. <u>The Permittee shall not discharge emissions from Dust Collector 3 (BH-3) external to the finishing line building enclosure in excess of 6,887 hours per year, calculated on a rolling 12-month basis.</u>

[A.A.C. R18-2-306.01.A and -331.A.3.a]

[Material Permit Condition is indicated by italics and underlines]

- **D.** Monitoring, Recordkeeping and Reporting Requirements
  - 1. A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions emanating from woodworking operations and in accordance with Condition I.C of this Attachment.

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

2. The Permittee shall monitor and maintain a record of the hours of operation that BH-3 exhausts external to the finishing building enclosure. At the end of each month, the Permittee shall calculate and keep a record of the total hours that BH-3 exhausted external to the finishing line building enclosure.

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

3. To demonstrate compliance with the 12-month rolling hourly limit in Condition IV.C.4, the Permittee shall calculate and keep a record of the 12-month hours of operation each month by adding the current month's total hours of operation exhausting external to the finishing line building enclosure to the previous eleven month's total hours of BH-3 operation exhausting external to the finishing line building enclosure.

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

4. 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]

5. 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.3.c]

- E. Compliance Assurance Monitoring for Opacity as a Surrogate for Particulate Matter
  - 1. Indicator Visible Emissions

[40 CFR 64.6(c)(1)(i)]

- 2. Monitoring Approach
  - a. The Permittee shall complete an instantaneous survey for visible emissions from the stack of BH-1and BH-2, once per day, every day any emission unit controlled by BH-1 or BH-2 is in operation in accordance with Condition I.C of this Attachment.

[40 CFR 64.3(b)(4)(iii)]

b. The Permittee shall complete an instantaneous survey for visible emissions from the stack of BH-3 when BH-3 is exhausted external to the finishing line building enclosure, once per day, every day any emission unit controlled by BH-3 is in operation in accordance with Condition I.C of this Attachment.

[40 CFR 64.3(b)(4)(iii)]

- 3. Excursion Determination
  - a. Any observation of visible emissions shall constitute an excursion.

    [40 CFR 64.6(c)(2)]
  - b. In addition to the above, the Permittee shall comply with all the requirements under Condition I.E of this Attachment as applicable.

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

#### F. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with A.A.C. R18-2-730.A.1, -730.B and -702.B.3.

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

## V. FUGITIVE DUST REQUIREMENTS

**A.** Applicability

This Section is applicable to any non-point source of fugitive dust at the facility.

**B.** Particulate Matter and Opacity

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

- 1. Emission Limitations and Standards
  - a. Opacity of emissions from any fugitive dust non-point source shall not be greater than 40%.

[A.A.C. R18-2-614]

b. The Permittee shall employ the following reasonable precautions to



prevent excessive amounts of particulate matter from becoming airborne:

(1) 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]

(2) 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]

(3) 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]

(4) 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]

(5) 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]

(6) 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]

(7) 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; or

[A.A.C. R18-2-607.B]

(8) Any other method as proposed by the Permittee and approved by the Director.

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

- 2. Monitoring and Recordkeeping Requirements
  - a. The Permittee shall maintain records of the dates on which any of the activities listed in Condition V.B.1.b were performed and the control measures that were adopted.



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

b. A certified EPA Reference Method 9 observer shall conduct a quarterly survey of visible emissions emanating from any non-point source of fugitive dust in accordance with Condition I.C of this Attachment.

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

#### 3. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with A.A.C. R18-2-604.A, -604.B, -605, -606, -607 and -614.

## VI. OTHER PERIODIC ACTIVITIES

- **A.** Abrasive Blasting
  - 1. Particulate Matter and Opacity
    - a. Emission Limitations and Standards

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:

- (1) Wet blasting;
- (2) Effective enclosures with necessary dust collecting equipment; or
- (3) 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.

[A.A.C. R18-2-702.B.3]

2. Monitoring and Recordkeeping Requirements

Each time an abrasive blasting project is conducted, the Permittee shall make 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. A certified EPA Reference Method 9 observer shall conduct a quarterly survey of visible emissions emanating from sandblasting or other abrasive blasting operations when in operation and in accordance with Condition I.C of this Attachment.

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



4. If there were no sandblasting or other abrasive blasting operations during a calendar quarter, then no quarterly survey of visible emissions is required. However, the Permittee shall record that no sandblasting or other abrasive blasting operations occurred during that calendar quarter.

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

5. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with A.A.C. R18-2-702.B.3 and -726.

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

- **B.** Use of Paints (Except for Finishing Operations Subject to Condition II of this Attachment)
  - 1. Volatile Organic Compounds and Opacity
    - a. Emission Limitations and Standards

While performing spray painting operations, the Permittee shall comply with the following requirements:

(1) The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, 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]

- (2) The Permittee or their designated contractor shall not either:
  - (a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
  - (b) Thin or dilute any architectural coating with a photochemically reactive solvent.

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

- (3) For the purposes of Condition VI.B.1.a(2), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20% of its total volume composed of the chemical compounds classified in Condition VI.B.1.a(3), or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:
  - (a) 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%.
  - (b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8%.
  - (c) A combination of ethylbenzene, ketones having branched



hydrocarbon structures, trichloroethylene or toluene: 20%.

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

(4) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Condition VI.B.1.a(3), it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

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

## b. Opacity

The Permittee shall not cause, allow or permit visible emissions from painting operations in excess of 20% opacity.

[A.A.C. R18-2-702.B.3]

- 2. Monitoring and Recordkeeping Requirements
  - a. Each time a spray painting project is conducted, the Permittee shall make a record of the following:
    - (1) The date the project was conducted;
    - (2) The duration of the project;
    - (3) Type of control measures employed;
    - (4) Safety Data Sheets (SDS) for all paints and solvents used in the project; and
    - (5) The amount of paint consumed during the project.
  - b. Architectural coating and spot painting projects shall be exempt from Condition VII.B.1.b.(1).

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

3. A certified EPA Reference Method 9 observer shall conduct a quarterly survey of visible emissions emanating from spray painting operations when in operation and in accordance with Condition I.C of this Attachment.

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

4. If there were no spray painting operations during a calendar quarter, then no quarterly survey of visible emissions is required. However, the Permittee shall record that no spray painting operations occurred during that calendar quarter.

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

5. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with A.A.C.R18-2-727.

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



#### C. Demolition/Renovation - Hazardous Air Pollutants

## 1. Emission Limitations and Standards

The Permittee shall comply with all of the requirements in National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 61 Subpart M for Asbestos.

[A.A.C. R18-2-1101.A.12]

## 2. Monitoring and Recordkeeping Requirement

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 Subsection shall be deemed compliance with A.A.C. R18-2-1101.A.12.

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



## ATTACHMENT "C": SPECIFIC CONDITIONS

## I. FINISHING OPERATION EMISSION CALCULATIONS

**A.** Finishing Lines 1 and 4

$$VOC_{FL1/4} = FO + TBC + NC + BH3$$

Where:

$$\begin{split} FO &= FO_{Cap} + FO_{UnCap} \\ FO_{Cap} &= (VOC_I - VOC_W) \times CaE \times (1\text{-}CoE) \\ FO_{UnCap} &= (VOC_I - VOC_W) \times (1\text{-}CaE) \end{split}$$

$$\begin{split} TBC &= TBC_{Cap} + TBC_{UnCAP} \\ &TBC_{Cap} = (VOC_I - VOC_W) \times CaE \times (1\text{-}CoE) \\ &TBC_{UnCap} = (VOC_I - VOC_W) \times (1\text{-}CaE) \end{split}$$

$$\begin{split} NC &= NC_{Cap} + NC_{UnCap} \\ NC_{Cap} &= (VOC_I \times WF) \times CaE \times (1\text{-}CoE) \\ NC_{UnCap} &= (VOC_I \times WF) \times (1\text{-}CaE) \end{split}$$

$$BH3 = L_{BH3} \times H_{BH3}$$

**B.** Finishing Line 3

$$VOC_{FL3} = VOC_I - VOC_W$$

## II. VARIABLE DEFINITIONS

 $VOC_{FL1/4}$  = VOC emissions from Finishing Lines 1 and 4 (lb/month)

 $VOC_{FL3}$  = VOC emissions from Finishing Line 3 (lb/month)

FO = VOC emissions from Finishing Operations (lb/month)

FO<sub>Cap</sub> = Captured and controlled VOC emissions from Finishing Operations

(lb/month)

FO<sub>UnCap</sub> = Uncaptured and uncontrolled VOC emissions from Finishing Operations

(lb/month)

TBC = VOC emissions from Trolley Belt Cleaning (lb/month)

TBC<sub>Cap</sub> = Captured and controlled VOC emissions from Trolley Belt Cleaning

(lb/month)



TBC<sub>UnCap</sub> = Uncaptured and uncontrolled VOC emissions from Trolley Belt Cleaning

(lb/month)

NC = VOC emissions from Nightly Cleaning (lb/month)

NC<sub>Cap</sub> = Captured and controlled emissions from Nightly Cleaning (lb/month)

NC<sub>UnCap</sub> = Uncaptured and uncontrolled emissions from Nightly Cleaning (lb/month)

BH3 = VOC emissions venting through Dust Collector (BH-3) when exhausted

external to the building enclosure

VOC<sub>I</sub> = VOC in the material issued for use in the specific operation (lb/month)

VOC<sub>W</sub> = VOC in the material collected as waste for the specific operation

(lb/month)

CaE = Capture efficiency of Regenerative Thermal Oxidizer (RTO-1) (percent

expressed as a fraction)

CoE = Control efficiency of Regenerative Thermal Oxidizer (RTO-1) (percent

expressed as a fraction)

WF = Fraction of VOC material issued that is not collected as waste during

Nightly Cleaning (percent expressed as a fraction)

L<sub>BH3</sub> = Contribution of VOC emissions from Finishing Lines 1 and 4 in the Dust

Collector (BH-3) exhaust (lb/hr)

H<sub>BH3</sub> = Hours of operation of Dust Collector (BH-3) when exhausting external

to the building enclosure (hours/month)



# ATTACHMENT "D": EQUIPMENT LIST

Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number			
Finishing Line 1 (Main Li	Finishing Line 1 (Main Line)								
Manual Sanding Downdraft Conveyor*	N/A	Cefla	TN7300/A/RBT/S	1172-1.1	2001	M1			
Rotary Sanding Machine	N/A	SlipCon	DiscMaster 10450	DMDDBB135	2004	M2			
Panel Cleaning Machine	N/A	Sorbini	VS/33-ACT-G/S	mp1sct21350	2001	M3			
Automatic Spray Booth 1	108.48 gallons per hour	Cefla	RotoStain ROT 10+10	11172/1.4a	2001	M4a			
Belt Cleaner	6.88 gallons per hour	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			



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number			
Finishing Line 1 (Main Lin	Finishing Line 1 (Main Line) (cont'd)								
Multi-level Stacker Unit	N/A	Cefla	TR3P3800/ 2V/2SCT-FIFO	11172/1.6	2001	M6			
Drying Oven 1	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	Roba Tech	1300/DI	684.04.13	2013	M10			
Manual Sanding Downdraft Conveyor*	N/A	Cefla	TN3500/A	11172/1.10	2001	M11			



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number		
Finishing Line 1 (Main Line) (cont'd)								
Panel Cleaning Machine	N/A	Sorbini	VS/33-ACT-G/S	MP1SCT21349	2001	M12		
Automatic Spray Booth 2	107.2 gallons per hour	Cefla	RotoStain ROT 10+10	11172/1.13a	2001	M13a		
Belt Cleaner	6.88 gallons per hour	Cefla	RotoStain ROT 10+10	11172/1.13b	2001	M13b		
Drying Oven 2/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 3	108.48 gallons per hour	Cefla	RotoStain ROT 10+10	11172/1.16A	2001	M16a		



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number
Finishing Line 1 (Main Li	ne) (cont'd)					
Belt Cleaner	6.88 gallons per hour	Cefla	RotoStain ROT 10+10	11172/1.16Ь	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 3	N/A	Cefla	PF7400/6/S	11172/1.21	2001	M21



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number			
Finishing Line 1 (Main Li	Finishing Line 1 (Main Line) (cont'd)								
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			
Panel Cleaning Machine	N/A	Sorbini	VS/33-ACT-G/S	MP1SC121348	2001	M25			
Automatic Spray Booth 4	95.48 gallons per hour	Cefla	SGM 12+12	11172/1.26a	2001	M26a			
Belt Cleaner	6.88 gallons per hour	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			



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number				
Finishing Line 1 (Main Li	Finishing Line 1 (Main Line) (cont'd)									
Drying Oven 4 - Flash Zone	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.28A	2001	M28a				
Drying Oven 4 - Cure Zone A	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.28B	2001	M28b				
Drying Oven 4 - Cure Zone B	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.28C	2001	M28c				
Drying Oven 4 - Cool Down Zone	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.28D	2001	M28d				
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				



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number
Finishing Line 1 (Main Li	ne) (cont'd)					
Roller Conveyor*	N/A	Sorbini	T/20-2MF/RE/RU	MR2TF21353	2001	M32
Automatic Spray Booth 5	95.84 gallons per hour	Cefla	SGM 12+12	11172/1.33a	2001	M33a
Belt Cleaner	6.88 gallons per hour	Cefla	SGM 12+12	11172/1.33b	2001	M33b
Multi-Level Stacker Unit	N/A	Cefla	TR3P3800/2V/ 2SCT-FIFO	11172/1.34	2001	M34
Drying Oven 5 - Flash Zone	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.35A	2001	M35a
Drying Oven 5 - Cure Zone A	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.35B	2001	M35b
Drying Oven 5 - Cure Zone B	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.35C	2001	M35c



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number		
Finishing Line 1 (Main Line) (cont'd)								
Drying Oven 5 - Cool Down Zone	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.35D	2001	M35d		
Roller Conveyor	N/A	Cefla	TR3500/133/2V2S	11172/1.36	2001	M36		
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 6	63.36 gallons per hour	Cefla	SGM 12+12	11172/1.40a	2001	M40a		
Belt Cleaner	6.88 gallons per hour	Cefla	SGM 12+12	11172/1.40Ь	2001	M40b		



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number				
Finishing Line 1 (Main Lin	Finishing Line 1 (Main Line) (cont'd)									
Multi-level Stacker Unit	N/A	Cefla	TR3P3800/ 2V2SCT-FIFO	11172/1.41	2001	M41				
Drying Oven 6 - Flash Zone	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.42a	2001	M42a				
Drying Oven 6 - Cure Zone A	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.42Ь	2001	M42b				
Drying Oven 6 - Cure Zone B	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.42c	2001	M42c				
Drying Oven 6 - Cool Down Zone	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.42d	2001	M42d				
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				



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number		
Finishing Line 1 (Main Line) (cont'd)								
Roll Conveyor	N/A	Cefla	TR3500/133/2V2S	11172/1.45	2001	M45		
Rotary Sanding Machine	N/A	MB Machinery	Roba-SB-13/O	999.12.17	2018	M46		
Manual Sanding Downdraft Conveyor	N/A	Cefla	TN 5500/A	11172/1.47	2001	M47		
Manual Sanding Downdraft Conveyor	N/A	Cefla	TN 5500/A	11172/1.48	2001	M48		
Panel Cleaning Machine	N/A	MB Machinery	Roba Anti Dust	1000.12.17	2018	M49		



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number				
Finishing Line 1 (Main Li	Finishing Line 1 (Main Line) (cont'd)									
Automatic Spray Booth 7	63.36 gallons per hour	Cefla	SGM 12+12	11172/1.50a	2001	M50a				
Belt Cleaner	6.88 gallons per hour	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 7 - Flash Zone	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.52a	2001	M52a				
Drying Oven 7 - Cure Zone A	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.52b	2001	M52b				
Drying Oven 7 - Cure Zone B	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.52c	2001	M52c				
Drying Oven 7 - Cool Down Zone	N/A	Cefla	FV4/3500/133/ 122/AER/S	11172/1.52d	2001	M52d				
Roll Conveyor	N/A	Cefla	TR3500/133/2V2S	11172/1.53	2001	M53				



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number			
Finishing Line 1 (Main Line) (cont'd)									
Belt Conveyor	N/A	Cefla	TR3500/133/2V2S	11172/1.54	2001	M54			
Finishing Line 3 (Expedite	e Line)								
Expedite Booth 1 Spray Booth	27.12 lb/hr	Cefla	LTAM/42/62	90027269-4	2001	E1.2			
Drying Enclosure/Oven	N/A	Cefla	LPF40/50	90027269-1	2001	E1.4			
Expedite Booth 2 Spray Booth	27.12 lb/hr	Cefla	LPA40-70	90027131	2001	E2.6			
Drying Oven/Tunnel	N/A	Cefla	EU2/3/1	11191/3.07	2001	E2.7			
UV Oven	N/A	Cefla	UV-R SP M2	SPM1514001	2015	E2.8			
Finishing Line 4 (Hybrid I	Finishing Line 4 (Hybrid Line)								
Belt Conveyor Input	N/A	Cefla	TN36 50/RBT	11190/1	2002	H25			



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number			
Finishing Line 4 (Hybrid Line) (cont'd)									
Rotary Sanding Machine	N/A	MB Machinery	Roba-SB-13/O	997.12.17	2018	H26			
Belt Conveyor	N/A	Cefla	TN3500	04010/17	2004	H27			
Panel Cleaning Machine	N/A	Sorbini	VS/33- ACT-G/S	MP1SC021412	2002	H28			
Automatic Spray Booth 8	48.0 gallons per hour	Cefla	EcoSprayer ROC3- W	11190/3a	2002	H29a			
Belt Cleaner	6.88 gallons per hour	Cefla	EcoSprayer ROC3- W	11190/3b	2002	Н29ь			
Downdraft Conveyor	N/A	Sorbini	VS/26-4C/S	MT250024091	2004	Н30ь			
Double Headed Reverse Roll Coater*	3.44 gallons per hour (N/A as currently used)	Sorbini	T/20-MR/S/R	MR2TTR21413	2001	Н31			



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number			
Finishing Line 4 (Hybrid Line) (cont'd)									
Wiping Conveyor Vacuum Belt	3.44 gallons per hour	Cefla	TN 4000/W/S/C	11191/6	2001	H32			
Roll Coater*	14.6 gallons per hour (N/A as currently used)	Sorbini	VS26/4C/4	MR1TTF4115	2004	Н33			
Wiping Conveyor Vacuum Belt	3.44 gallons per hour	Cefla	TN 7500/W/S	11190/7	2001	Н34			
Multi-Level Stacking Unit	N/A	Cefla	TR3P3800/2V2S/ CT-FIFO	11190/9	2002	Н35			
Drying Oven 8 - Flash Zone	N/A	Cefla	FV2/3500/133/ 30/AE	11190/10	2001	H36a			
Drying Oven 8 - Cure Zone	N/A	Cefla	FV2/3500/133/ 30/AE	11190/10	2001	Н36ь			
Roller Conveyor	N/A	Cefla	TR3800/2V/2S/133	11190/11	2002	Н37			



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number				
Finishing Line 4 (Hybrid I	Finishing Line 4 (Hybrid Line) (cont'd)									
Downdraft Sanding Belt	N/A	Cefla	TN6000/A	11190/12	2002	Н38				
Rotary Sanding Machine with Panel Cleaner	N/A	MB Machinery	Roba-SB-13/O-R	998.12.17	2018	Н39				
Panel Cleaning Machine	N/A	Sorbini	VS/33-ACT-F	MP1SC021458	2002	H40				
Automatic Spray Booth 9	31.68 gallons per hour	Cefla	EcoSprayer ROC3-	11190/15a	2002	H41a				
Belt Cleaner	6.88 gallons per hour	Cefla	EcoSprayerROC3-	11190/15b	2002	H41b				
Multi-Level Stacking Unit	N/A	Cefla	TR3P/3800/2V/ 2S/CT-FIFO	11190/16	2002	H42				
Drying Oven 9 - Flash Zone	N/A	Cefla	FV4/3500/133/ 88/AER	11190/17a	2002	H43a				



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number			
Finishing Line 4 (Hybrid Line) (cont'd)									
Drying Oven 9 - Cure Zone A	N/A	Cefla	FV4/3500/133/ 88/AER	11190/17b	2002	Н43Ь			
Drying Oven 9 - Cure Zone B	N/A	Cefla	FV4/3500/133/ 88/AER	11190/17b	2002	Н43с			
Drying Oven 9 - Cool Down Zone	N/A	Cefla	FV4/3500/133/ 88/AER	11190/17c	2002	H43d			
Roller Conveyor	N/A	Cefla	TR3800/2V/ 2S/133	11190/18	2002	H44			
Belt Conveyor	N/A	Quickwood	PRO1400V	7235	2001	H45			
Downdraft Sanding Belt	N/A	Cefla	TN4000/A	04010/23	2004	H46			
Feather Duster	N/A	CCI Technologies	DQ-TBV-54H	D004-007A	2004	H47			



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number			
Finishing Line 4 (Hybrid Line) (cont'd)									
Automatic Spray Booth 10	40.32 gallons per hour	Superfici	Magnum 2.2.2 Asecco'S'	T290-001A	2018	H48a			
Belt Cleaner	6.88 gallons per hour	Superfici	Magnum 2.2.2 Asecco'S'	T290-001B	2018	Н48ь			
Roll Conveyor	N/A	Cefla	1600/2V/2S/133	04010/26	2004	H49			
Drying Oven 10 - Flash Zone	N/A	Cefla	FV4/3500/88/S	04010/27a	2004	H50a			
Drying Oven 10 - Cure Zone A	N/A	Cefla	FV4/3500/88/S	04010/27b	2004	Н50ь			
Drying Oven 10 - Cure Zone B	N/A	Cefla	FV4/3500/88/S	04010/27c	2004	H50c			



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number		
Finishing Line 4 (Hybrid Line) (cont'd)								
Drying Oven 10 - Cool Down Zone	N/A	Cefla	FV4/3500/ 88/S	04010/27d	2004	H50d		
Roll Conveyor	N/A	Cefla	TR3800/2V/ 2S/133	04010/28	2004	H51		
Roll Conveyor	N/A	Cefla	TR6155/133	04010/13	2004	H22		
Belt Conveyor	N/A	Hytrol Conveyor	TL	480831	2004	H52		
Assembly, Small Parts, Sa	lvage, and Milling	Operations						
Drilling Machines in Assembly Operations	Various	Various	Various	Various	Various	ASM1		
Drilling Machines in Small Parts Operations	Various	Various	Various	Various	Various	ASM2		



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number				
Assembly, Small Parts, Sa	Assembly, Small Parts, Salvage, and Milling Operations (cont'd)									
Panel Saws and Cutting Machines in Milling Operations	Various	Various	Various	Various	Various	ASM3				
Pollution Control Equipm	ent									
Dust Collector 1	23,462 acfm	Air Lanco	188RLP10	TBD	N/A	BH-1				
Dust Collector 2	5,889 acfm	Torit	96НРТ	IG670271	N/A	BH-2				
Dust Collector 3	82,453 acfm	Donaldson	484RFW10	TBD	N/A	BH-3				
Regenerative Thermal	13 MMBtu/hr	MEGTEC	ENTERPRISE	113444	2001					
Oxidizer	67,000 scfm	Systems	II -700-95		2001	RTO-1				
Fuel Burning Equipment										
Hot Water Heater 1	3.576 MMBtu/hr	RBI	HB4000N2E2A2C A00C3E1G1J5	121572667	2015	HWH-1				
Hot Water Heater 2	3.576 MMBtu/hr	RBI	HB4000N2E2A2C A00C3E1G1J5	12172670	2015	HWH-2				



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number			
Fuel Burning Equipment (cont'd)									
Hot Water Heater 3	3.576 MMBtu/hr	RBI	HB4000N2E2A2C A00C3E1G1J5	61674044	2015	HWH-3			
CoRayVac Heating System	3.30 MMBtu/hr	CoRayVac	CRV-B10	9043750	1993	CRV-1			
Finishing Heater 1	0.52 MMBtu/hr	Absolute Aire	V3-HOM	33658 E/DA 10250	2019	FH-1			
Finishing Heater 2	0.52 MMBtu/hr	Absolute Aire	V3-HOM	33658 E/DA 10250	2019	FH-2			
Finishing Heater 3	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-13	2001	FH-3			
Finishing Heater 4	0.52 MMBtu/hr	Absolute Aire	V3-HOM	33658 E/DA 10250	2019	FH-4			
Finishing Heater 5	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-17	2001	FH-5			
Finishing Heater 6	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-18	2001	FH-6			



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number			
Fuel Burning Equipment (cont'd)									
Finishing Heater 7	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-20	2001	FH-7			
Finishing Heater 8	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-22	2001	FH-8			
Finishing Heater 9	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-23	2001	FH-9			
Finishing Heater 10	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106	2001	FH-10			
Finishing Heater 11	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-6	2001	FH-11			
Finishing Heater 12	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-2	2001	FH-12			
Finishing Heater 13	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-25	2001	FH-13			



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number			
Fuel Burning Equipment (cont'd)									
Finishing Heater 14	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-16	2001	FH-14			
Finishing Heater 15	0.52 MMBtu/hr	Absolute Aire	V3-HOM	33658 E/DA 10250	2019	FH-15			
Finishing Heater 16	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-26	2001	FH-16			
Finishing Heater 17	0.52 MMBtu/hr	Absolute Aire	V3-HOM	33658 E/DA 10250	2019	FH-17			
Finishing Heater 18	0.52 MMBtu/hr	Absolute Aire	V3-HOM	33658 E/DA 10250	2019	FH-18			
Whitewood Heater 19	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-7	2001	FH-19			
Whitewood Heater 20	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-3	2001	FH-20			
Whitewood Heater 21	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-12	2001	FH-21			



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number
Whitewood Heater 22	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-15	2001	FH-22
Whitewood Heater 23	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-9	2001	FH-23
Whitewood Heater 24	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-1	2001	FH-24
Whitewood Heater 25	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-5	2001	FH-25
Whitewood Heater 26	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-8	2001	FH-26
Whitewood Heater 27	0.55 MMBtu/hr	Duo-Aire	CAA-2D	CA6106-10	2001	FH-27
SK Heater 1	0.40 MMBtu/hr	Modine 6-580	PDP400	43010917090222- 5409	2021	SK-1
SK Heater 2	0.40 MMBtu/hr	Modine 6-580	PDP400	43010917095121- 7126	2021	SK-2
Small Parts Heater 1	0.40 MMBtu/hr	Modine 6-580	PDP400	43010917095121- 7048	2021	SP-1



Type of Equipment	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number		
Pump Room and Test Spray Booth								
Miscellaneous Solvent Waste Totes	Varies	Varies	Varies	Varies	Varies	SWT		
Miscellaneous Finishing Material Tanks and Drums	Varies	Varies	Varies	Varies	Varies	FMTD		
Test Spray Booth	416 hours per year	Global Finishing Solutions	FP-3-S	44832	2003	TSB1		

<sup>\*</sup> This equipment module is used for conveying only.