



2/11/2015

Robert Naftanail
Masco Cabinetry Middlefield LLC (KraftMaid Plant #1)
15535 South State Ave.
P.O.Box 1055
Middlefield, OH 44062

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0228000186
Permit Number: P0117737
Permit Type: Renewal
County: Geauga

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)963-1200 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Erica R. Engel-Ishida, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for**

Masco Cabinetry Middlefield LLC (KraftMaid Plant #1)

Facility ID:	0228000186
Permit Number:	P0117737
Permit Type:	Renewal
Issued:	2/11/2015
Effective:	2/11/2015
Expiration:	2/11/2020



Division of Air Pollution Control
Permit-to-Install and Operate
for
Masco Cabinetry Middlefield LLC (KraftMaid Plant #1)

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Authorization

Facility ID: 0228000186
Application Number(s): A0051353
Permit Number: P0117737
Permit Description: FEPTIO Renewal permit for wood working operations.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 2/11/2015
Effective Date: 2/11/2015
Expiration Date: 2/11/2020
Permit Evaluation Report (PER) Annual Date: Oct 1 - Sept 30, Due Nov 15

This document constitutes issuance to:

Masco Cabinetry Middlefield LLC (KraftMaid Plant #1)
16052 INDUSTRIAL PKWY
Middlefield, OH 44062

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

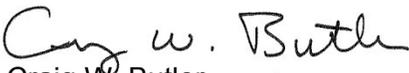
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)963-1200

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Authorization (continued)

Permit Number: P0117737

Permit Description: FEPTIO Renewal permit for wood working operations.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID: P011
 Company Equipment ID: P1-13324
 Superseded Permit Number: P0107177
 General Permit Category and Type: Not Applicable

Emissions Unit ID: P012
 Company Equipment ID: P1-13322
 Superseded Permit Number: P0107177
 General Permit Category and Type: Not Applicable

Group Name: Group A

Emissions Unit ID:	P010
Company Equipment ID:	P1-13326
Superseded Permit Number:	P0107177
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P015
Company Equipment ID:	P1-25795
Superseded Permit Number:	P0107177
General Permit Category and Type:	Not Applicable

Group Name: Group C

Emissions Unit ID:	P008
Company Equipment ID:	P1-13325
Superseded Permit Number:	P0107177
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P009
Company Equipment ID:	P1-13327
Superseded Permit Number:	P0107177
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P014
Company Equipment ID:	P1-24807
Superseded Permit Number:	P0107177
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Masco Cabinetry Middlefield LLC (KraftMaid Plant #1)
Permit Number: P0117737
Facility ID: 0228000186
Effective Date: 2/11/2015

A. Standard Terms and Conditions



1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.



13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



Final Permit-to-Install and Operate
Masco Cabinetry Middlefield LLC (KraftMaid Plant #1)
Permit Number: P0117737
Facility ID: 0228000186
Effective Date: 2/11/2015

B. Facility-Wide Terms and Conditions



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.
2. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.



Final Permit-to-Install and Operate
Masco Cabinetry Middlefield LLC (KraftMaid Plant #1)
Permit Number: P0117737
Facility ID: 0228000186
Effective Date: 2/11/2015

C. Emissions Unit Terms and Conditions



1. P011, P1-13324

Operations, Property and/or Equipment Description:

Wood chipper exhausted to a 4,968 cfm Baghouse, MASCO ID P1-13324.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)a, f)(1)a, and f)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)(1)(b)	<p>Emissions of particulate matter less than or equal to 10 microns in diameter (PM₁₀) shall not exceed 0.0025 grain per dscf of exhaust gases from the baghouse stack.</p> <p>PM₁₀ emissions shall not exceed 0.11 pound per hour and 0.47 ton per year from the baghouse stack.</p> <p>Visible particulate emissions (PE) from the baghouse stack shall not exceed 0% opacity as a 6-minute average.</p>
b.	OAC rule 3745-31-05(A)	<p>Particulate emissions (PE) shall not exceed 0.005 grain per dscf of exhaust gases from the baghouse stack.</p> <p>PE shall not exceed 0.21 pound per hour and 0.93 ton per year from the baghouse stack.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Fugitive PE and PM ₁₀ emissions shall not exceed 0.62 ton per year from truck loading. Visible emissions of fugitive dust from truck loading shall not exceed 10% opacity as a 3-minute average.
c.	OAC rule 3745-17-11(B) OAC rule 3745-17-07(A) OAC rule 3745-17-08(B) OAC rule 3745-17-07(B)	The requirements established pursuant to OAC rules 3745-17-11(B), 3745-17-07(A), 3745-17-08(B) and 3745-17-07(B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(D)(1)(b).

(2) Additional Terms and Conditions

- a. The emissions from this emissions unit shall be vented to the baghouse P1-13324 (DC-3) at all times when this emissions unit is in operation.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitations contained in this permit, the acceptable range established for the pressure drop across the baghouse P1-13324 (DC-3) is between 1 to 5 inches of water. The listed pressure drop range applies at all times except following rebagging until sufficient filter cake has developed on the bags.
- (2) The permittee shall properly install, operate and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a weekly basis. The monitoring equipment shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;



- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.



- (4) Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual particulate observations from daily to weekly for this emissions unit if the following conditions are met:
- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings if any visible emissions are observed.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (2) The permittee shall identify in the PER the following information concerning the operations of the baghouse during the 12-month reporting period for this/these emissions unit:
 - a. each period of time (start time and date and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - b. any period of time (start time and date and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
 - c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in "a" (above) where a prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- (3) The permittee shall submit annual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northeast District Office) each year in the PER and shall cover the previous year.



f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE from the baghouse shall not exceed 0% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, OAC rule 3745-17-03(B)(1) and OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

Emissions of PM₁₀ shall not exceed 0.0025 grain per dscf of exhaust gases from the baghouse stack.

PM₁₀ emissions shall not exceed 0.11 pound per hour and 0.47 ton per year from the baghouse stack.

Applicable Compliance Method:

Compliance with the grain loading and hourly limitations has been demonstrated at similar, but larger, control equipment at this facility. If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 51, Appendix M, Method 201.

The ton per year emission limitation was developed by multiplying the short-term allowable PM₁₀ emission limitation (0.11 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

Visible emissions of fugitive dust from truck loading shall not exceed 10% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, OAC rule 3745-17-03(B)(1) and OAC rule 3745-17-03(B)(3).



d. Emission Limitation:

PE shall not exceed 0.005 grain per dscf of exhaust gases from the baghouse stack.

PE shall not exceed 0.21 pound per hour and 0.93 ton per year from the baghouse stack.

Applicable Compliance Method:

Compliance with the grain loading and hourly limitations has been demonstrated at similar, but larger, control equipment at this facility. If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 1 through 5.

The ton per year emission limitation was developed by multiplying the short-term allowable PE emission limitation (0.21 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

Fugitive PE and PM₁₀ emissions shall not exceed 0.62 ton per year from truck loading.

Applicable Compliance Method:

Compliance was demonstrated one time based upon the maximum dust loading as follows:

$$E = 621 \text{ tons dust/year} \times 2 \text{ lbs/ton} \times 1 \text{ ton}/2000 \text{ lbs} = 0.62 \text{ ton/year}$$

where:

E = estimated emissions, in tons per year;

621 = the tons of sawdust anticipated to be loaded into trucks per year; and

2 lbs/ton = an emission factor taken from RACM, Table 2.17-1, Fugitive Dust Emission Factors for Woodworking Operations.

g) Miscellaneous Requirements

- (1) The permittee shall submit an updated Emissions Unit Equipment Table for this emissions unit to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include an updated demonstration of loading to the baghouse. The updated table shall include a complete list of equipment for each emissions unit (including an identification of all equipment that is/are permanently shut down and dismantled and new or replacement equipment) as of the end of the calendar year and shall highlight or otherwise flag the changes from the previous year. This report



shall be submitted to the Director (the Ohio EPA, Northeast District Office) by February 28 of each year or may be included with the PER.

After this report is submitted, the Director (the Ohio EPA, Northeast District Office) may consider the changes to determine if a modification to the issued permit is necessary. In general, a few changes which are not significant and which do not affect the operation of the control equipment will not trigger a request for a submittal of an application to modify the issued permit.

The permittee shall also submit an updated table of equipment which is exempt from air permitting requirements to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include the complete list of such equipment including any PTI exempt equipment installed during the last calendar year and an identification of all equipment permanently shut down and dismantled. This report shall be submitted to the Director (the Ohio EPA, Northeast District Office) by February 28 of each year or may be included in the PER.

P011 - Grinder 2/1/2010 PLANT 1 DUST COLLECTORS.XLS GRINDER Dust Collection Sizes and Reading			
For:			GRINDER
EPA ID#			P1-244
KMC Asset #			P1-13324
Feb-10	KraftMaid Design Velocity =		5400
CFM			
Equipment:		Running Total for 5400v	
HF13 20HP 18.2 BHP 2233	4968	MAX CFM @ 5400v	4241
RPM Fan inlet 13"			
4968 Max CFM @ 5400v 10" SP			
Size of pipe in inches		Amount of CFM in pipe	
GRINDER		1	1



2. P012, P1-13322

Operations, Property and/or Equipment Description:

Woodworking equipment exhausted to a 21,200 cfm Baghouse, MASCO ID P1-13322.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)a, f)(1)a, and f)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)(1)(b)	<p>Emissions of particulate matter less than or equal to 10 microns in diameter (PM₁₀) shall not exceed 0.0025 grain per dscf of exhaust gases from the baghouse stack.</p> <p>PM₁₀ emissions shall not exceed 0.45 pound per hour and 1.99 tons per year from the baghouse stack.</p> <p>Visible particulate emissions (PE) from the baghouse stack shall not exceed 0% opacity as a 6-minute average.</p>
b.	OAC rule 3745-31-05(A)	<p>PE shall not exceed 0.005 grain per dscf of exhaust gases from the baghouse stack.</p> <p>PE shall not exceed 0.91 pound per hour and 3.98 tons per year from the baghouse stack.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Fugitive PE and PM ₁₀ emissions shall not exceed 2.90 tons per year from the dumpster. Visible emissions of fugitive dust from the dumpster shall not exceed 10% opacity as a 3-minute average.
c.	OAC rule 3745-17-11(B) OAC rule 3745-17-07(A) OAC rule 3745-17-08(B) OAC rule 3745-17-07(B)	The requirements established pursuant to OAC rules 3745-17-11(B), 3745-17-07(A), 3745-17-08(B) and 3745-17-07(B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(D)(1)(b).

(2) Additional Terms and Conditions

- a. The emissions from this emissions unit shall be vented to the baghouse P1-13322 (DC-1) at all times when this emissions unit is in operation.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitations contained in this permit, the acceptable range established for the pressure drop across the baghouse P1-13322 (DC-1) is between 1 to 5 inches of water. The listed pressure drop range applies at all times except following rebagging until sufficient filter cake has developed on the bags.
- (2) The permittee shall properly install, operate and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a weekly basis. The monitoring equipment shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;



- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and



- c. any corrective actions taken to eliminate the visible emissions.
- (4) Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual particulate observations from daily to weekly for this emissions unit if the following conditions are met:
- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings if any visible emissions are observed.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (2) The permittee shall identify in the PER the following information concerning the operations of the baghouse during the 12-month reporting period for this/these emissions unit:
 - a. each period of time (start time and date and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - b. any period of time (start time and date and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
 - c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in "a" (above) where a prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- (3) The permittee shall submit annual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northeast District Office) each year in the PER and shall cover the previous year.



f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE from the baghouse shall not exceed 0% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, OAC rule 3745-17-03(B)(1) and OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

Emissions of PM₁₀ shall not exceed 0.0025 grain per dscf of exhaust gases from the baghouse stack.

PM₁₀ emissions shall not exceed 0.45 pound per hour and 1.99 tons per year from the baghouse stack.

Applicable Compliance Method:

Compliance with the grain loading and hourly limitations has been demonstrated at similar, but larger, control equipment at this facility. If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 51, Appendix M, Method 201.

The ton per year emission limitation was developed by multiplying the short-term allowable PM₁₀ emission limitation (0.45 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

Visible emissions of fugitive dust from the dumpster shall not exceed 10% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, OAC rule 3745-17-03(B)(1) and OAC rule 3745-17-03(B)(3).



d. Emission Limitation:

PE shall not exceed 0.005 grain per dscf of exhaust gases from the baghouse stack.

PE shall not exceed 0.91 pound per hour and 3.98 tons per year from the baghouse stack.

Applicable Compliance Method:

Compliance with the grain loading and hourly limitations has been demonstrated at similar, but larger, control equipment at this facility. If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 1 through 5.

The ton per year emission limitation was developed by multiplying the short-term allowable PE emission limitation (0.91 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

g) **Miscellaneous Requirements**

- (1) The permittee shall submit an updated Emissions Unit Equipment Table for this emissions unit to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include an updated demonstration of loading to the baghouse. The updated table shall include a complete list of equipment for each emissions unit (including an identification of all equipment that is/are permanently shut down and dismantled and new or replacement equipment) as of the end of the calendar year and shall highlight or otherwise flag the changes from the previous year. This report shall be submitted to the Director (the Ohio EPA, Northeast District Office) by February 28 of each year or may be included with the PER.

After this report is submitted, the Director (the Ohio EPA, Northeast District Office) may consider the changes to determine if a modification to the issued permit is necessary. In general, a few changes which are not significant and which do not affect the operation of the control equipment will not trigger a request for a submittal of an application to modify the issued permit.

The permittee shall also submit an updated table of equipment which is exempt from air permitting requirements to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include the complete list of such equipment including any PTI exempt equipment installed during the last calendar year and an identification of all equipment permanently shut down and dismantled. This report shall be submitted to the Director (the Ohio EPA, Northeast District Office) by February 28 of each year or may be included in the PER.



P012 - Cefla 1 2/1/2010 PLANT 1 DUST COLLECTORS.XLS CEFLA #1 Dust Collection Sizes and Reading			
For:		CEFLA #1	
EPA ID#		P012	
KMC Asset #		P1-13322	
Feb-10		KraftMaid Design Velocity =	4600 CFM
Equipment:		Running Total for 4600 V	
HF29 75HP 73 BHP 991 RPM	21200	MAX CFM @ 4600	25917
Fan inlet 29"			
21200 Max CFM @ 4600v 12" SP			
		of pipe in (inches)	ount of CFM in pipe ning Total CFM in Pipe
C ROTO SAND UNIT P1-10 (PRIMER)			
C ROTO SAND UNIT P1-10 (PRIMER)			
RBINI BRUSH MACHINE			
RBINI BRUSH MACHINE			
RBINI BRUSH MACHINE			
JSH ASSEMBLY DENNIBER P1-03 (PRIMER) - VAC BLOWER			7
JSH ASSEMBLY DENNIBER P1-03 (PRIMER) - VAC BLOWER			7
JSH ASSEMBLY DENNIBER P1-03 (PRIMER)			8
JSH ASSEMBLY DENNIBER P1-03 (PRIMER)			11
JSH ASSEMBLY DENNIBER P1-03 (PRIMER)			14
JSH ASSEMBLY DENNIBER P1-03 (PRIMER)			17
JSH ASSEMBLY DENNIBER P1-14 (TOP COAT) - VAC BLOWE			4
JSH ASSEMBLY DENNIBER P1-14 (TOP COAT) - VAC BLOWE			2
JSH ASSEMBLY DENNIBER P1-14 (TOP COAT)			5
JSH ASSEMBLY DENNIBER P1-14 (TOP COAT)			8
JSH ASSEMBLY DENNIBER P1-14 (TOP COAT)			1
JSH ASSEMBLY DENNIBER P1-14 (TOP COAT)			4
RBINI BRUSH MACHINE			0
RBINI BRUSH MACHINE			6
RBINI BRUSH MACHINE			1
C ROTO SAND UNIT (TOP COAT) - VAC BLOWER			5
C ROTO SAND UNIT (TOP COAT) - VAC BLOWER			8
C ROTO SAND UNIT (TOP COAT)			1
C ROTO SAND UNIT (TOP COAT)			7



3. Emissions Unit Group - Group A: P010, and P015.

EU ID	Operations, Property and/or Equipment Description
P010	Woodworking equipment exhausted to a 31,150 cfm Baghouse, MASCO ID P1-13326.
P015	Woodworking equipment exhausted to a 31,150 cfm Baghouse, MASCO ID P1-25795.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)a, f)(1)a, f)(1)b, and f)(2).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)(1)(b)	Emissions of particulate matter less than or equal to 10 microns in diameter (PM ₁₀) shall not exceed 0.0025 grain per dscf of exhaust gases from the baghouse stack. PM ₁₀ emissions shall not exceed 0.67 pound per hour and 2.92 tons per year from the baghouse stack. Visible particulate emissions (PE) from the baghouse stack shall not exceed 0% opacity as a 6-minute average.
b.	OAC rule 3745-31-05(A)	PE shall not exceed 0.005 grain per dscf of exhaust gases from the baghouse stack. PE shall not exceed 1.34 pounds per hour and 5.85 tons per year from the



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		baghouse stack. fugitive PE and PM ₁₀ emissions from emissions units P009, P010, P014 and P015, combined, shall not exceed 5.76 tons per year from the dumpster. Visible emissions of fugitive dust from the dumpster shall not exceed 10% opacity as a 3-minute average.
c.	OAC rule 3745-17-11(B) OAC rule 3745-17-07(A) OAC rule 3745-17-08(B) OAC rule 3745-17-07(B)	The requirements established pursuant to OAC rules 3745-17-11(B), 3745-17-07(A), 3745-17-08(B) and 3745-17-07(B) are less stringent than the requirements established pursuant to OAC rules 3745-31-05(D)(1)(b) and 3745-31-05(A).

(2) Additional Terms and Conditions

- a. The emissions from emissions unit P010 shall be vented to the baghouse P1-13326 (DC-5) at all times when the emissions unit is in operation. The emissions from emissions unit P015 shall be vented to the baghouse P1-25795 (DC-2) at all times when the emissions unit is in operation.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitations contained in this permit, the acceptable range established for the pressure drop across each baghouse [P1-13326 (DC-5) and P1-25795 (DC-2)] is between 1 to 5 inches of water. The listed pressure drop range applies at all times except following rebagging until sufficient filter cake has developed on the bags.
- (2) The permittee shall properly install, operate and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across each baghouse on a weekly basis. The monitoring equipment shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the range established in accordance with this permit, the permittee shall promptly investigate the



cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across each baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from each stack serving these emissions units. The presence or absence of any visible emissions shall



be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.
- (4) Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:
- a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings if any visible emissions are observed.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA e-Business Center: Air Services by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.
- (2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the baghouse during the 12-month reporting period for this/these emissions unit:
 - a. each period of time (start time and date and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - b. any period of time (start time and date and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
 - c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in "a" (above) where a prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.



- (3) The permittee shall submit annual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving the emissions unit and/or any visible particulate emissions of fugitive dust were observed from the dumpster area; and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northeast District Office) each year in the PER and shall cover the previous year.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE from each baghouse shall not exceed 0% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, OAC rule 3745-17-03(B)(1) and OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

Emissions of PM₁₀ shall not exceed 0.0025 grain per dscf of exhaust gases from each baghouse stack.

PM₁₀ emissions shall not exceed 0.67 pound per hour and 2.92 tons per year from each baghouse stack.

Applicable Compliance Method:

Compliance with the grain loading and hourly limitations shall be demonstrated through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 51, Appendix M, Method 201 for PM₁₀ and the requirements specified in f)(2).

The tons per year emission limitation was developed by multiplying the short-term allowable PM₁₀ emission limitation (0.67 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

Visible emissions of fugitive dust from the dumpster shall not exceed 10% opacity as a 3-minute average.



Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, OAC rule 3745-17-03(B)(1) and OAC rule 3745-17-03(B)(3).

d. Emission Limitation:

PE shall not exceed 0.005 grain per dscf of exhaust gases from each baghouse stack.

PE shall not exceed 1.34 pounds per hour and 5.85 tons per year from each baghouse stack.

Applicable Compliance Method:

Compliance with the grain loading and hourly limitations shall be demonstrated through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 for PE and the requirements specified in f)(2).

The tons per year emission limitation was developed by multiplying the short-term allowable PE emission limitation (1.34 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

Fugitive PE and PM₁₀ emissions from emissions units P009, P010, P014 and P015, combined, shall not exceed 5.76 tons per year from the dumpster.

Applicable Compliance Method:

Compliance was demonstrated one time based upon the maximum dust loading as follows:

$$E = 23,041 \text{ tons dust/year} \times 2 \text{ lbs/ton} \times 0.25 \times 1 \text{ ton}/2000 \text{ lbs} = 5.76 \text{ tons/year}$$

where:

E = estimated emissions, in tons per year;

23,041 = the tons of sawdust anticipated to be loaded into the dumpster per year;

2 lbs/ton = an emission factor taken from RACM, Table 2.17-1, Fugitive Dust Emission Factors for Woodworking Operations; and

0.25 = the emission factor based upon the estimated 75% control efficiency for the three sided enclosure for loading trucks.



(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. For the purpose of emissions testing, some of the woodworking emissions units from MASCO's Plants 1, 2 and 3 have been grouped together as similar units based upon the size of the fabric filters; between 30,000 cfm and 35,999 cfm. These units are listed below. This list of emissions units may change over time as units are installed, modified, or removed from the three plants. Regardless of the list below, any woodworking emissions units which are controlled by a fabric filter with an air exhaust between 30,000 cfm and 35,999 cfm are part of this group.

Plant 1

P010 (P1-13326) – 31,150 cfm

P015 (P1-25795) – 31,150 cfm

Plant 2

P011 (P2-10909) – 31,150 cfm

P015 (P2-10912) – 31,150 cfm

Plant 3

P004 (P3-12743) – 31,150 cfm

One of the emissions units from this group shall be selected for emissions testing every five years. The selection of the unit for testing shall be based upon considerations such as production, baghouse maintenance issues, performance and other considerations as may be pertinent. The selection of the unit to be tested shall be made jointly by MASCO and Ohio EPA, Northeast District Office.

Some of the emissions units in this group may exhaust only inside the plant. In some cases the configuration of the baghouse stack and/or the air conditioning unit will not allow for Reference Method 1 to be met. These emissions units shall not be considered for emissions testing.

Emissions unit P015 in Plant 1 was tested and demonstrated compliance on May 10, 2012. The emission testing for this group of emissions units shall be conducted again within 6 months of May 10, 2017.

b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 0.005 grain per dscf and the PM₁₀ emission limitation of 0.0025 grain per dscf from the baghouse stack and with the PE and PM₁₀ hourly mass emission limitations specified in b).

c. The following test methods shall be employed to demonstrate compliance with the allowable emission rates:

for PE - 40 CFR Part 60, Appendix A, Methods 1 through 5; and

for PM₁₀ - 40 CFR Part 51, Appendix M, Method 201.



Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is at current operating conditions, unless otherwise specified or approved by the Ohio EPA, Northeast District Office.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northeast District Office's refusal to accept the results of the emission test(s).
- f. Personnel from the Ohio EPA, Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northeast District Office.

g) **Miscellaneous Requirements**

- (1) The permittee shall submit an updated Emissions Unit Equipment Table for this emissions unit to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include an updated demonstration of loading to the baghouse. The updated table shall include a complete list of equipment for each emissions unit (including an identification of all equipment that is/are permanently shut down and dismantled and new or replacement equipment) as of the end of the calendar year and shall highlight or otherwise flag the changes from the previous year. This report shall be submitted to the Director (the Ohio EPA, Northeast District Office) by February 28 of each year or may be included with the PER.

After this report is submitted, the Director (the Ohio EPA, Northeast District Office) may consider the changes to determine if a modification to the issued permit is necessary. In general, a few changes which are not significant and which do not affect the operation of the control equipment will not trigger a request for a submittal of an application to modify the issued permit.

The permittee shall also submit an updated table of equipment which is exempt from air permitting requirements to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include the complete list of such equipment



including any PTI exempt equipment installed during the last calendar year and an identification of all equipment permanently shut down and dismantled. This report shall be submitted to the Director (the Ohio EPA, Northeast District Office) by February 28 of each year or may be included in the PER.

P010 - Cefla 2 2/1/2010 PLANT 1 DUST COLLECTORS.XLS CEFLA #2				
Dust Collection Sizes and Reading				
For:			CEFLA #2	
EPA ID#			P1-242	
KMC Asset #			P1-13326	
Feb-10	KraftMaid Design Velocity =		5200	
			CFM	
Equipment:			Running Total for 5200 V	
HF33 100HP 91.4 BHP 825 RPM	31150	MAX CFM @ 5200v	28588	
Fan inlet 33"				
31150 Max CFM @ 5200v 9" SP				
		Size of pipe in (inches)	Amount of CFM in Pipe	Running Total CFM in Pipe
1	DMC ROTO SANDER UNIT	8	1815	1815
2	DMC ROTO SANDER UNIT	8	1815	3630
3	SORBINI BRUSH MACHINE	6	1021	4651
4	SORBINI BRUSH MACHINE	6	1021	5672
5	SORBINI BRUSH MACHINE	6	1021	6693
6	CEFLA #2 BRUSH SYSTEM (PRIMER) - VAC BLOWER	5	709	7402
7	CEFLA #2 BRUSH SYSTEM (PRIMER) - VAC BLOWER	5	709	8111
8	CEFLA #2 BRUSH SYSTEM (PRIMER)	6	1021	9132
9	CEFLA #2 BRUSH SYSTEM (PRIMER)	6	1021	10153
10	CEFLA #2 BRUSH SYSTEM (PRIMER)	6	1021	11174
11	CEFLA #2 BRUSH SYSTEM (PRIMER)	6	1021	12195
12	DOWNDRAFT CONVEYOR	8	1815	14010
13	CEFLA #2 BRUSH SYSTEM (TOP COAT) - VAC BLOWE	5	709	14720
14	CEFLA #2 BRUSH SYSTEM (TOP COAT) - VAC BLOWE	5	709	15429
15	CEFLA #2 BRUSH SYSTEM (TOP COAT)	6	1021	16450
16	CEFLA #2 BRUSH SYSTEM (TOP COAT)	6	1021	17471
17	CEFLA #2 BRUSH SYSTEM (TOP COAT)	6	1021	18492
18	CEFLA #2 BRUSH SYSTEM (TOP COAT)	6	1021	19513
19	SORBINI BRUSH MACHINE	8	1815	21328
20	SORBINI BRUSH MACHINE	8	1815	23143
21	SORBINI BRUSH MACHINE	8	1815	24958
22	DMC ROTO SANDER UNIT	8	1815	26773
23	DMC ROTO SANDER UNIT	8	1815	28588
24	DOWNDRAFT CONVEYOR	8	1815	30403



P015 - Framing 2/1/2010 PLANT 1 DUST COLLECTORS.XLS ROUTERS, SANDERS Dust Collection Sizes and Reading			
For:			ROUTERS AND Saws
EPA ID#			P015
KMC Asset #			P1-25795
Feb-10	KraftMaid Design Velocity =		5200
			CFM
Equipment:		Running Total for 5200 V	
HF33 100HP 91.4 BHP 825	31150	0 MAX CFM @ 5200	19342
RPM Fan inlet 33"			
31150 Max CFM @ 5200v 9" SP			
	Size of pipe in inches	Amount of CFM in pipe	Running Total CFM in Pipe
Router - 4 Head Heain (slide gate-closed when off)	4	454	454
Router - 4 Head Heain (slide gate-closed when off)	4	454	908
Router - 4 Head Heain (slide gate-closed when off)	4	454	1361
Router - 4 Head Heain (slide gate-closed when off)	5	709	2070
Router - 4 Head Heain (slide gate-closed when off)	5	709	2779
Router - 4 Head Heain (slide gate-closed when off)	5	709	3488
Router - 4 Head Heain (slide gate-closed when off)	5	709	4197
Router- single head Heian	4	454	4651
Router- single head Heian	5	709	5360
UNISAW P1-75	5	709	6069
Flute cutting machine	6	1021	7090
Shaper	5	709	7799
Koch Borer	5	709	8508
Koch Borer	5	709	9217
Koch Borer	5	709	9926
Koch Borer	5	709	10635
NORTHFIELD RADIAL ARM SAW	4	454	11089
DATO SAW P1-092	5	709	11798
Power Matic Table Saw	5	709	12507
Whirlwind Saw	4	454	12961
Kreg Single Spindle Pocket Borer	4	454	13415
Kreg Single Spindle Pocket Borer	0	0	13415
Evan Double Spindle Borer	4	454	13869
Power Matic Table Saw	5	709	14578
Table Saw	0	0	14578
Koch Borer	3	255	14833
Koch Borer	3	255	15088
Koch Borer	3	255	15343
Koch Borer	3	255	15599
Koch Borer	3	255	15854
Koch Borer	3	255	16109
Koch Borer	3	255	16364
Koch Borer	3	255	16620
Koch Borer	4	454	17074
Koch Borer	4	454	17527
Weeke BHC 360	8	1815	19342



4. Emissions Unit Group -Group C: P008,P009,P014,

EU ID	Operations, Property and/or Equipment Description
P008	Woodworking equipment exhausted to a 53,000 cfm Baghouse, MASCO ID P1-13325.
P009	Woodworking equipment exhausted to a 53,000 cfm Baghouse, MASCO ID P1-13327.
P014	Woodworking equipment exhausted to a 53,000 cfm Baghouse, MASCO ID P1-24807.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)a, b)(2)a, f)(1)a, f)(1)b, and f)(2).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)(1)(b)	Emissions of particulate matter less than or equal to 10 microns in diameter (PM ₁₀) shall not exceed 0.0025 grain per dscf of exhaust gases from the baghouse stack. PM ₁₀ emissions shall not exceed 1.14 pounds per hour and 4.95 tons per year from the baghouse stack. Visible particulate emissions (PE) from the baghouse stack shall not exceed 0% opacity as a 6-minute average.
b.	OAC rule 3745-31-05(A)	PE shall not exceed 0.005 grain per dscf of exhaust gases from the baghouse stack. PE shall not exceed 2.27 pounds per



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		hour and 9.95 tons per year from the baghouse stack. Visible emissions of fugitive dust from the dumpster shall not exceed 10% opacity as a 3-minute average. See b)(2)a and b)(2)b.
c.	OAC rule 3745-17-11(B) OAC rule 3745-17-07(A) OAC rule 3745-17-08(B) OAC rule 3745-17-07(B)	The requirements established pursuant to OAC rules 3745-17-11(B), 3745-17-07(A), 3745-17-08(B) and 3745-17-07(B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(D)(1)(b).

(2) Additional Terms and Conditions

- a. Fugitive PE and PM₁₀ emissions shall not exceed the following:
 - i. For emissions unit P008, 7.26 tons per year from truck loading; and
 - ii. For emissions unit P009, P010, P014, and P015 combined, 5.76 tons per year from the dumpsters.
- b. The emissions from each emissions unit shall be vented to following the baghouse at all times when the emissions unit is in operation:
 - i. For emissions unit P008, baghouse P1-13325 (DC-4);
 - ii. For emissions unit P009, baghouse P1-13327 (DC-6); and
 - iii. For emissions unit P014, baghouse P1-24807 (DC-7).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitations contained in this permit, the acceptable range established for the pressure drop across each baghouse [P1-13325 (DC-4), P1-13327 (DC-6), and P1-24807(DC-7)] is between 1 to 5 inches of water. The listed pressure drop range applies at all times except following rebagging until sufficient filter cake has developed on the bags.
- (2) The permittee shall properly install, operate and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The



permittees shall record the pressure drop across each baghouse on a weekly basis. The monitoring equipment shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across each baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring



requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from each stack serving these emissions units. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.
- (4) Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual observations from daily to weekly for this emissions unit if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings if any visible emissions are observed.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA e-Business Center: Air Services by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.
- (2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the baghouse during the 12-month reporting period for this/these emissions unit:
 - a. each period of time (start time and date and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - b. any period of time (start time and date and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
 - c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;



- d. each incident of deviation described in “a” (above) where a prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- (3) The permittee shall submit annual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving the emissions unit and/or any visible particulate emissions of fugitive dust were observed from the dumpster area; and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northeast District Office) each year in the PER and shall cover the previous year.
- f) **Testing Requirements**
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:

Visible PE from each baghouse shall not exceed 0% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, OAC rule 3745-17-03(B)(1) and OAC rule 3745-17-03(B)(3).
 - b. Emission Limitation:

Emissions of PM₁₀ shall not exceed 0.0025 grain per dscf of exhaust gases from each baghouse stack.

PM₁₀ emissions shall not exceed 1.14pounds per hour and 4.95 tons per year from each baghouse stack.

Applicable Compliance Method:

Compliance with the grain loading and hourly limitations shall be demonstrated through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 51, Appendix M, Method 201 for PM₁₀ and the requirements specified in f)(2).

The tons per year emission limitation was developed by multiplying the short-term allowable PM₁₀ emission limitation (1.14 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton.



Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

Visible emissions of fugitive dust from dumper shall not exceed 10% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, OAC rule 3745-17-03(B)(1) and OAC rule 3745-17-03(B)(3).

d. Emission Limitation:

PE shall not exceed 0.005 grain per dscf of exhaust gases from each baghouse stack.

PE shall not exceed 2.27 pounds per hour and 9.95 tons per year from each baghouse stack.

Applicable Compliance Method:

Compliance with the grain loading and hourly limitations shall be demonstrated through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 for PE and the requirements specified in f)(2).

The tons per year emission limitation was developed by multiplying the short-term allowable PE emission limitation (2.27 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

Fugitive PE and PM₁₀ emissions from emissions units P009, P010, P014 and P015, combined, shall not exceed 5.76 tons per year from the dumpster.

Applicable Compliance Method:

Compliance was demonstrated one time based upon the maximum dust loading as follows:

$$E = 23,041 \text{ tons dust/year} \times 2 \text{ lbs/ton} \times 0.25 \times 1 \text{ ton}/2000 \text{ lbs} = 5.76 \text{ tons/year}$$

where:

E = estimated emissions, in tons per year;



23,041 = the tons of sawdust anticipated to be loaded into the dumpster per year;

2 lbs/ton = an emission factor taken from RACM, Table 2.17-1, Fugitive Dust Emission Factors for Woodworking Operations; and

0.25 = the emission factor based upon the estimated 75% control efficiency for the three sided enclosure for loading trucks.

f. Emission Limitation:

Fugitive PE and PM₁₀ emissions shall not exceed 7.26 tons per year from truck loading.

Applicable Compliance Method:

Compliance was demonstrated one time based upon the maximum dust loading as follows:

$$E = 7,256 \text{ tons dust/year} \times 2 \text{ lbs/ton} \times 1 \text{ ton}/2000 \text{ lbs} = 7.26 \text{ tons/year}$$

where:

E = estimated emissions, in tons per year;

7,256 = the tons of sawdust anticipated to be loaded into trucks per year; and

2 lbs/ton = an emission factor taken from RACM, Table 2.17-1, Fugitive Dust Emission Factors for Woodworking Operations.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. For the purpose of emissions testing, some of the woodworking emissions units from MASCO's Plants 1, 2 and 3 have been grouped together as similar units based upon the size of the fabric filters; 40,000 cfm and more. These units are listed below. This list of emissions units may change over time as units are installed, modified, or removed from the three plants. Regardless of the list below, any woodworking emissions units which are controlled by a fabric filter with an air exhaust 40,000 cfm and more are part of this group.

Plant 1

P008 (P1-13325) – 53,000 cfm

P009 (P1-13327) – 53,000 cfm

P014 (P1-24807) – 53,000 cfm

Plant 2

P013 (P2-10914) – 40,000 cfm

Plant 3

P002 (P3-20866) – 58,500 cfm

P005 (P3-12740) – 47,000 cfm



P006 (P3-12741) – 47,000 cfm
P007 (P3-20879) – 47,000 cfm
P008 (TBD) - 42,500 cfm
P009 (TBD) – 42,500 cfm

One of the emissions units from this group shall be selected for emissions testing every five years. The selection of the unit for testing shall be based upon considerations such as production, baghouse maintenance issues, performance and other considerations as may be pertinent. The selection of the unit to be tested shall be made jointly by MASCO and Ohio EPA, Northeast District Office.

Some of the emissions units in this group may exhaust only inside the plant. In some cases the configuration of the baghouse stack and/or the air conditioning unit will not allow for Reference Method 1 to be met. These emissions units shall not be considered for emissions testing.

Emissions unit P009 in Plant 3 was tested and demonstrated compliance on November 27, 2012. The emission testing for this group of emissions units shall be conducted again within 6 months of November 27, 2017.

- b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 0.005 grain per dscf and the PM₁₀ emission limitation of 0.0025 grain per dscf from the baghouse stack and with the PE and PM₁₀ hourly mass emission limitations specified in b)(1)a and b)(1)b.
- c. The following test methods shall be employed to demonstrate compliance with the allowable emission rates:

for PE - 40 CFR Part 60, Appendix A, Methods 1 through 5; and

for PM₁₀ - 40 CFR Part 51, Appendix M, Method 201.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is at current operating conditions, unless otherwise specified or approved by the Ohio EPA, Northeast District Office.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northeast District Office's refusal to accept the results of the emission test(s).
- f. Personnel from the Ohio EPA, Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and



information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northeast District Office.

g) **Miscellaneous Requirements**

- (1) The permittee shall submit an updated Emissions Unit Equipment Table for this emissions unit to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include an updated demonstration of loading to the baghouse. The updated table shall include a complete list of equipment for each emissions unit (including an identification of all equipment that is/are permanently shut down and dismantled and new or replacement equipment) as of the end of the calendar year and shall highlight or otherwise flag the changes from the previous year. This report shall be submitted to the Director (the Ohio EPA, Northeast District Office) by February 28 of each year or may be included with the PER.

After this report is submitted, the Director (the Ohio EPA, Northeast District Office) may consider the changes to determine if a modification to the issued permit is necessary. In general, a few changes which are not significant and which do not affect the operation of the control equipment will not trigger a request for a submittal of an application to modify the issued permit.

The permittee shall also submit an updated table of equipment which is exempt from air permitting requirements to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include the complete list of such equipment including any PTI exempt equipment installed during the last calendar year and an identification of all equipment permanently shut down and dismantled. This report shall be submitted to the Director (the Ohio EPA, Northeast District Office) by February 28 of each year or may be included in the PER.



P008 - Special Parts 2/1/2010 PLANT 1 DUST COLLECTORS.XLS CUSTOM CUTTING Dust Collection Sizes and Reading			
For:		SPECIAL PARTS	
EPA ID#		P008	
KMC Asset #		P1-13325	
Feb-10		KraftMaid Design Velocity = 5800 CFM	
Equipment:			
HF41 200HP 189 BHP 727 RPM Fan inlet 41"		53000	MAX CFM @ 5800v 18442
53000 Max CFM @ 5800v 11" SP			
		Size of pipe in (inches)	Amount of CFM in pipe
			Running Total CFM in Pipe
1	DeWalt Chop Saw	2	127
2	DeWalt Chop Saw	2	127
3	DeWalt Chop Saw	2	127
4	Power Matic Shaper	5	791
5	Power Matic Shaper	5	791
6	Power Matic Shaper	5	791
7	Power Matic Shaper	5	791
8	Centauro Band Saw	0	0
9	Down Draft Table	6	1139
10	Down Draft Table	6	1139
11	CounterTop Sander	2	127
12	DeWalt Chop Saw	0	0
13	Down Draft Table	6	1139
14	Down Draft Table	6	1139
15	Down Draft Table	0	0
16	Down Draft Table	0	0
17	Ayen Drilling Machine	5	791
18	Ayen Drilling Machine	3	285
19	Edge Band Trimmer	3	285
20	Whirlwind Sander	6	1139
21	Whirlwind Sander	6	1139
22	Uni Saw	5	791
23	Altendorf Table Saw	4	506
24	Altendorf Table Saw	5	791
25	Furnas Saw	5	791
26	Power Matic Table Saw	0	0
27	Power Matic Table Saw	5	791
28	Huffman Dovetail Single	4	506
29	Huffman Dovetail Double	4	506
30	Delta Cut Off Saw	2	127
31	Delta Cut Off Saw	2	127
32	Whirlwind Sander	0	0
33	DeWalt Chop Saw	4	506
34	DeWalt Chop Saw	3	285
35	DeWalt Chop Saw	3	285
36	DeWalt Chop Saw	3	285
37	DeWalt Chop Saw	3	285



P009 - Sanding 2/1/2010 PLANT 1 DUST COLLECTORS.XLS 2/1/2010 SANDING			
Dust Collection Sizes and Reading			
For:			SANDING
EPA ID#			P009
KMC Asset #			P1-13327
Feb-10		KraftMaid Design Velocity =	5800 CFM
Equipment:		Running Total for 5800 V	
HF41 200HP 189 BHP 727	53000	MAX CFM @ 5800v	44319
RPM Fan inlet 41"			
53000 Max CFM @ 5800v 11" SP			
	Size of pipe in inches	Amount of CFM in Pipe	Running Total CFM in Pipe
Edge Sander Left Side	4	506	506
Edge Sander Left Side	4	506	1012
Edge Sander Right Side	4	506	1518
Edge Sander Right Side	4	506	2025
Calibration Sander LSM 8 RR	10	3163	5188
Calibration Sander LSM 8 RR	10	3163	8351
Calibration Sander LSM 8 RR	6	1139	9490
Calibration Sander LSM 8 RR	6	1139	10629
Calibration Sander LSM 8 RR	7	1550	12179
Cefla Down Draft Router Table	8	2025	14204
Cefla Down Draft Router Table	8	2025	16228
Finish Sander LSM8 LL	8	2025	18253
Finish Sander LSM8 LL	8	2025	20277
Finish Sander LSM8 LL	6	1139	21416
Finish Sander LSM8 LL	5	791	22207
Finish Sander LSM8 LL	5	791	22998
Finish Sander LSM8 LL	6	1139	24137
Finish Sander LSM8 LL	7	1550	25687
Crossgrain Sander LSM8 OSR 3	6	1139	26825
Crossgrain Sander LSM8 OSR 3	6	1139	27964
Crossgrain Sander LSM8 OSR 3	6	1139	29103
Crossgrain Sander LSM8 OSR 3	6	1139	30242
Crossgrain Sander LSM8 OSR 3	6	1139	31381
Crossgrain Sander LSM8 OSR 3	7	1550	32931
Fladder	8	2025	34955
Fladder	8	2025	36980
Brush Machine EA 4	4	506	37486
Brush Machine EA 4	4	506	37992
Brush Machine EA 4	7	1550	39542
Brush Machine EA 4	6	1139	40681
Brush Machine EA 4	7	1550	42231
Whirlwind Sander	0	0	42231
ARMINIUS SANDER	4	506	42737
ARMINIUS SANDER	4	506	43243
ARMINIUS SANDER	4	506	43749
ARMINIUS SANDER	3	285	44034
ARMINIUS SANDER	3	285	44319



P014 - Sanding (2) 2/1/2010 PLANT 1 DUST COLLECTORS.XLS 2/1/2010 SANDING Dust Collection Sizes and Reading			
For:		SANDING	
EPA ID#		P014	
KMC Asset #		P1-24807	
Feb-10	KraftMaid Design Velocity =		5800 CFM
Equipment:			
HF41 200HP 189 BHP 727	53000	MAX CFM @ 5800v	44952
RPM Fan inlet 41"			
53000 Max CFM @ 5800v 11" SP			
	Size of pipe in inches	Amount of CFM in pipe	Running Total CFM in Pipe
Calibration Sander LSM 8 RR	10	3163	3163
Calibration Sander LSM 8 RR	10	3163	6327
Calibration Sander LSM 8 RR	6	1139	7466
Calibration Sander LSM 8 RR	6	1139	8604
Calibration Sander LSM 8 RR	7	1550	10154
Cefla Down Draft Router Table	7	1550	11704
Cefla Down Draft Router Table	7	1550	13255
Finish Sander LSM8 LL	7	1550	14805
Finish Sander LSM8 LL	7	1550	16355
Finish Sander LSM8 LL	6	1139	17493
Finish Sander LSM8 LL	5	791	18284
Finish Sander LSM8 LL	5	791	19075
Finish Sander LSM8 LL	6	1139	20214
Finish Sander LSM8 LL	7	1550	21764
Crossgrain Sander LSM8 OSR 3	6	1139	22903
Crossgrain Sander LSM8 OSR 3	6	1139	24042
Crossgrain Sander LSM8 OSR 3	6	1139	25180
Crossgrain Sander LSM8 OSR 3	6	1139	26319
Crossgrain Sander LSM8 OSR 3	6	1139	27458
Crossgrain Sander LSM8 OSR 3	7	1550	29008
Fladder	8	2025	31033
Fladder	8	2025	33057
Brush Machine EA 8	6	1139	34196
Brush Machine EA 8	6	1139	35335
Brush Machine EA 8	6	1139	36474
Brush Machine EA 8	6	1139	37613
Brush Machine EA 8	6	1139	38751
Homag line (sanding) - left side	4	506	39258
Homag line (sanding) - left side	4	506	39764
Homag line (sanding) - left side	4	506	40270
Homag line (sanding) - right side	4	506	40776
Homag line (sanding) - right side	4	506	41282
Homag line (sanding) - right side	4	506	41788
Homag line (sanding) - right side	4	506	42294
Homag line (sanding) - right side	4	506	42800
Homag line (sanding) - left side	4	506	43307
Homag line (sanding) - left side	4	506	43813
Downdraft Table	6	1139	44952