Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Certified Mail

3/2/2011

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

Mr. Tim More
MASCO Cabinetry, Middlefield LLC (KraftMaid Plant 2)
15535 S STATE AVE
P.O Box 1055
Middlefield, OH 44062

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0228000213
Permit Number: P0106511
Permit Type: Administrative Modification
County: Geauga

Dear Permit Holder:

Enclosed please find a final 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. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI 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
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NEDO

Response to Comments

Response to comments for: Permit-To-Install and Operate

Facility ID:	0228000213
Facility Name:	MASCO Cabinetry, Middlefield LLC (KraftMaid Plant 2)
Facility Description:	Cabinet Manufacturer
Facility Address:	15535 S STATE AVE MIDDLEFIELD, OH 44062 Geauga County
Permit #:	P0106511, Administrative Modification
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Plain Dealer on 01/29/2011. The comment period ended on 02/28/2011.	
Hearing date (if held)	**NA**
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: **None**
    a. Comment: **None**
    b. Response: **None**
2. Topic: **None**
    a. Comment: **None**
    b. Response: **None**

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
MASCO Cabinetry, Middlefield LLC (KraftMaid Plant 2)

Facility ID:	0228000213
Permit Number:	P0106511
Permit Type:	Administrative Modification
Issued:	3/2/2011
Effective:	3/2/2011
Expiration:	5/18/2014

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
MASCO Cabinetry, Middlefield LLC (KraftMaid Plant 2)

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Authorization

Facility ID: 0228000213
Application Number(s): A0015149, A0039783
Permit Number: P0106511
Permit Description: Administrative Modification
Permit Type: Administrative Modification
Permit Fee: $1,200.00
Issue Date: 3/2/2011
Effective Date: 3/2/2011
Expiration Date: 5/18/2014
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

MASCO Cabinetry, Middlefield LLC (KraftMaid Plant 2)
15535 S STATE AVE
MIDDLEFIELD, OH 44062

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

Ohio 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)425-9171

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

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0106511
Permit Description: Administrative Modification

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

Emissions Unit ID:	**F003**
Company Equipment ID:	P2-10910
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P009**
Company Equipment ID:	P2-10906
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P013**
Company Equipment ID:	P2-10914
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable

Group Name: P010 and P012

Emissions Unit ID:	**P010**
Company Equipment ID:	P2-10904
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P012**
Company Equipment ID:	P2-10903
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable

Group Name: P011 and P015

Emissions Unit ID:	**P011**
Company Equipment ID:	P2-10909
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P015**
Company Equipment ID:	P2-10912
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable

Group Name: P6-8, 14, 19-21

Emissions Unit ID:	**P006**
Company Equipment ID:	P2-10916
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P007**
Company Equipment ID:	P2-10911
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P008**

Company Equipment ID:	P2-21588
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P014**
Company Equipment ID:	P2-10905
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P019**
Company Equipment ID:	P2-10918
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P020**
Company Equipment ID:	P2-10915
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P021**
Company Equipment ID:	P2-10917
Superseded Permit Number:	02-20473
General Permit Category and Type:	Not Applicable

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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. 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 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 Ohio EPA DAPC, Northeast District Office 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[1] 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 emissions 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.

[1] Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

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.

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.

C. Emissions Unit Terms and Conditions

1. F003, P2-10910

Operations, Property and/or Equipment Description:

Grinder with 7900 cfm air return cyclone MASCO ID P2-10910

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. None.

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(A)(3)	Fugitive emissions of particulate matter less than or equal to 10 microns in diameter (PM_{10}) shall not exceed 3.07 tons per year from the grinder. Fugitive particulate emissions (PE) shall not exceed 3.07 tons per year from the grinder.
b.	OAC rule 3745-17- 07(B)	Visible emissions of fugitive dust from the grinder shall not exceed 20% opacity as a 3-minute average.
c.	OAC rule 3745-17- 08(B)	The requirements established pursuant to OAC rule 3745-17-08(B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The cyclone exhaust does not vent into the atmosphere. Rather, the exhaust air from the cyclone is recirculated into the grinder and becomes process air in the grinder. The grinder has an opening through which excess air escapes.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the grinder. 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 location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(2) Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual observations from daily to weekly for the grinder 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 semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed from the grinder and (b) describe any corrective actions taken to minimize or eliminate the visible 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.

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director 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.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1)a and b)(1)b of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible emissions of fugitive dust from the grinder shall not exceed 20% 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 and OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

Fugitive emissions of PM_{10} shall not exceed 3.07 tons per year from the grinder.

Fugitive PE shall not exceed 3.07 tons per year from the grinder.

Applicable Compliance Method:

Compliance was demonstrated by a one time calculation based upon the maximum loading as follows:

43,800 tons/year x 0.35 lb/ton* x (1-.8)** x 1 ton/2000 lbs = 1.53 tons/year

where:

43,800 = maximum annual throughput for this emissions unit, in tons;

0.35 = emission factor 0.35 lb/ton from RACM Table 2.17, Fugitive dust Emission factors for Woodworking Operations; and

0.8 = estimated control efficiency of 80% for the cyclone.

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.

F003 - grinder PLANT 2 DUST COLLECTORS.XLS GRINDER			
Dust Collection Sizes and Reading			
For:		LARGE WOOD GRINDER	
EPA ID#		**F003**	
KMC Asset #		**P2-10910**	
DUST COLLECTOR #8			
Date: 5/2006	KraftMaid Design Velocity =		5000
Fan Motor FLA		39	
As Of 8/2/07	Fan Motor Amps		45
Motor running	115%	Loaded	CFM Running Total
Equipment 30 HP 28.5 BHP 1665 RPM Fan inlet 17"	**7900**	MAX CFM @ 5000v	**9217**
7900 Max CFM @ 5000 v 10" SP			
Size of pipe in inches		Amount of CFM in pipe	
GRINDER COLLECTOR			
GRINDER COLLECTOR	17	7881	7881
P2-267 DUST COLLECTOR	7	1336	9217

2. P009, P2-10906

Operations, Property and/or Equipment Description:

Woodworking equipment exhausting to a 11,200 cfm Baghouse, MASCO ID P2-10906

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) 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 0.24 pound per hour and 1.05 tons per year. Visible particulate emissions (PE) from the baghouse 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 0.48 pound per hour and 2.10 tons per year.
c.	OAC rule 3745-17-11(B) OAC rule 3745-17-07(A)	The requirements established pursuant to OAC rules 3745-17-11(B) and 3745-17-07(A) are less stringent than the

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		requirements established pursuant to OAC rules 3745-31-05(D)(1)(b) and 3745-31-05(A).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The pressure drop across the baghouse shall be maintained within the range of 1 to 5 inches of water while the emissions unit is in operation. The listed pressure drop range applies at all times except following rebagging until sufficient filter cake has developed on the bags.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

(2) 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.

(3) 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 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.

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director 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. The PER shall include any deviations from the monitored pressure drop across the baghouse as well as the information required in e)(1) above.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1)a and b)(1)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 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

PE shall not exceed 0.48 pound per hour and 2.10 tons per year.

Applicable Compliance Method:

This emission limitation is based upon the design of the baghouse and compliance with the grain loading limitation. Compliance with the grain loading limitation has been demonstrated at similar, but larger, control equipment at this facility.

If required, compliance with the hourly limitation shall be demonstrated based upon the methods and procedures specified in OAC rule 3745-17-03(B)(10) and 40 CFR Part 60, Appendix A, Methods 1 through 5.

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.48 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs 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:

PM_{10} emissions shall not exceed 0.24 pound per hour and 1.05 tons per year.

Applicable Compliance Method:

This emission limitation is based upon the design of the baghouse and compliance with the grain loading limitation. Compliance with the grain loading limitation has been demonstrated at similar, but larger, control equipment at this facility.

If required, compliance with the hourly limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 51, Appendix M, Method 201.

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.24 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation:

Emissions of PM_{10} shall not exceed 0.0025 grain per dscf of exhaust gases from the baghouse stack.

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

Applicable Compliance Method:

If required, compliance with the grain loading limitations shall be demonstrated based upon the methods and procedures specified in OAC rule 3745-17-03(B)(10).

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.

F003 - grinder PLANT 2 DUST COLLECTORS.XLS GRINDER **Dust Collection Sizes and Reading**			
For:		LARGE WOOD GRINDER	
EPA ID#		**F003**	
KMC Asset #		**P2-10910**	
DUST COLLECTOR #8			
Date: 5/2006	KraftMaid Design Velocity =		5000
Fan Motor FLA		39	
As Of 8/2/07	Fan Motor Amps		45
Motor running	115%	Loaded	CFM Running Total
Equipment 30 HP 28.5 BHP 1665 RPM Fan inlet 17"	**7900**	MAX CFM @ 5000v	**9217**
7900 Max CFM @ 5000 v 10" SP			
Size of pipe in inches		Amount of CFM in pipe	
GRINDER COLLECTOR			
GRINDER COLLECTOR	17	7881	7881
P2-267 DUST COLLECTOR	7	1336	9217

3. P013, P2-10914

Operations, Property and/or Equipment Description:

Woodworking equipment exhausting to a 40,000 cfm baghouse, MASCO ID P2-10914

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) 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 0.86 pound per hour and 3.75 tons per year. Visible particulate emissions (PE) from the baghouse 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 1.71 pounds per hour and 7.51 tons per year.
c.	OAC rule 3745-17-11(B) OAC rule 3745-17-07(A)	The requirements established pursuant to OAC rules 3745-17-11(B) and 3745-17-07(A) are less stringent than the

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		requirements established pursuant to OAC rules 3745-31-05(D)(1)(b) and 3745-31-05(A).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The pressure drop across the baghouse shall be maintained within the range of 1 to 5 inches of water while the emissions unit is in operation. The listed pressure drop range applies at all times except following rebagging until sufficient filter cake has developed on the bags.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

(2) 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.

(3) 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 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.

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director 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. The PER shall include any deviations from the monitored pressure drop across the baghouse as well as the information required in e)(1) above.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1)a and b)(1)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 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

PE shall not exceed 1.71 pounds per hour and 7.51 tons per year.

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated based upon the methods and procedures specified in OAC rule 3745-17-03(B)(10) and the requirements specified in f)(2).

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (1.71 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs 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:

PM_{10} emissions shall not exceed 0.86 pound per hour and 3.75 tons per year.

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 51, Appendix M, Method 201 and the requirements specified in f)(2).

The tpy emission limitation was developed by multiplying the short-term allowable PM_{10} emission limitation (0.86 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation:

Emissions of PM_{10} shall not exceed 0.0025 grain per dscf of exhaust gases from the baghouse stack.

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

Applicable Compliance Method:

Compliance 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 40 CFR Part 51, Appendix M, Method 201 for PM_{10} and the requirements specified in f)(2).

(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 beginning in 2012. 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.

b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 0.005 grain per dscf and 0.0025 grain PM_{10} per dscf from the baghouse stack and with the PE and PM_{10} 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 PM_{10} - 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.

P013 - custom cutting PLANT 2 DUST COLLECTORS.XLS CUSTOM CUTTING

Dust Collection Sizes and Reading

For:			CUSTOM CUTTING		
EPA ID#			**P013**		
KMC Asset #			**P2-10914**		
DUST COLLECTOR #12					
Date: 5/2006		KraftMaid Design Velocity =		4800	
Fan Motor FLA			168		
As Of 8/2/07		Fan Motor Amps		100	
Motor running	60%		Loaded	CFM Running Total	
Equipment 125 HP 117 BHP 1155 RPM Fan inlet 52"	**36432**		MAX CFM @ 4800v	**39531**	
44000 Max CFM @ 5000v 10" SP					
Size of pipe in inches			Amount of CFM in pipe		
CUSTOM CUTTING					
1	SE9400 EDGEBANDER 159	6	CC	942	942
2	SE9400 EDGEBANDER 159	6	CC	942	1885
3	KL-10 EDGEBANDER 161	5	CC	654	2539
4	KL-10 EDGEBANDER 161	5	CC	654	3194
5	KL-10 EDGEBANDER 161	8	CC	1675	4869

6	BACK GROOVE SAW/UNIT 85	5	CC	654	5524
7	HOLZMA #21	7	CC	1283	6807
8	HOLZMA #21	9	CC	2121	8927
9	WEIMA GEINDER	10	CC	2618	11545
10	PIN ROUTER P2-125	4	CC	419	11964
11	PIN ROUTER P2-125	7	CC	1283	13247
12	POWERMATIC SAW	5	CC	654	13901
13	HOLZMA #22	7	CC	1283	15184
14	HOLZMA #22	9	CC	2121	17305
15	WEIMA GEINDER	10	CC	2618	19923
16	HOLZMA #23	7	CC	1283	21206
17	HOLZMA #23	9	CC	2121	23326
18	WEIMA GEINDER	10	CC	2618	25944
19	FLOOR & CEILING ROUTER	4	CC	419	26363
20	FLOOR & CEILING ROUTER	4	CC	419	26782
21	FLOOR & CEILING ROUTER	4	CC	419	27201
22	FLOOR & CEILING ROUTER	4	CC	419	27620
23	HOLZMA #24	7	CC	1283	28902
24	HOLZMA #24	9	CC	2121	31023
25	WEIMA GEINDER	10	CC	2618	33641
26	BHC 600	5	CC	654	34295
27	BHC 600	5	CC	654	34950
28	BHC 600	5	CC	654	35604
29	BHC 600	5	CC	654	36259
30	BHC 600	5	CC	654	36913
31	BHC 600	10	CC	2618	39531

4. Emissions Unit Group - P010 and P012: P010, P012,

EU ID	Operations, Property and/or Equipment Description
P010	Woodworking equipment exhausting to a 36,342 cfm baghouse, MASCO ID P2-10904
P012	Woodworking equipment exhausting to a 36,342 cfm baghouse, MASCO ID P2-10903

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) 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 0.78 pound per hour and 3.41 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 1.56 pounds per hour and 6.82 tons per year from the baghouse stack.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-11(B) OAC rule 3745-17-07(A)	The requirements established pursuant to OAC rules 3745-17-11(B) and 3745-17-07(A) 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. None.

c) Operational Restrictions

(1) The pressure drop across the baghouse shall be maintained within the range of 1 to 5 inches of water while the emissions unit is in operation. The listed pressure drop range applies at all times except following rebagging until sufficient filter cake has developed on the bags.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

(2) 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.

(3) 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 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.

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director 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. The PER shall include any deviations from the monitored pressure drop across the baghouse as well as the information required in e)(1) above.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1)a and b)(1)b of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

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

<u>Applicable Compliance Method</u>:

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 and OAC rule 3745-17-03(B)(1).

b. <u>Emission Limitation</u>:

PE shall not exceed 1.56 pounds per hour and 6.82 tons per year from the baghouse stack.

<u>Applicable Compliance Method</u>:

Compliance with the hourly limitation shall be demonstrated based upon the methods and procedures specified in OAC rule 3745-17-03(B)(10) and the requirements specified in f)(2).

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (1.56 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs 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:

PM_{10} emissions shall not exceed 0.78 pound per hour and 3.41 tons per year from the baghouse stack.

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 51, Appendix M, Method 201 and the requirements specified in f)(2).

The tpy emission limitation was developed by multiplying the short-term allowable PM_{10} emission limitation (0.78 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation:

Emissions of PM_{10} shall not exceed 0.0025 grain per dscf of exhaust gases from the baghouse stack.

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

Applicable Compliance Method:

Compliance 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 40 CFR Part 51, Appendix M, Method 201 for PM_{10} and the requirements specified in f)(2).

(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; 36,000 cfm – 39,999 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 36,000 cfm and 39,999 cfm are part of this group.

Plant 1
None

Plant 2
P006 (P2-10916) – 39,400 cfm
P007 (P2-10911) – 39,400 cfm
P008 (P2-21588) – 39,400 cfm
P010 (P2-10904) – 36,432 cfm
P012 (P2-10903) – 36,432 cfm

P014 (P2-10905) – 39,400 cfm
P019 (P2-10918) – 39,400 cfm
P020 (P2-10915) – 39,400 cfm
P021 (P2-10917) – 39,400 cfm

Plant 3
P001 (P3-20865) – 36,432 cfm

One of the emissions units from this group shall be selected for emissions testing every five years beginning in 2012. 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.

b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 0.005 grain per dscf and 0.0025 grain PM_{10} per dscf from the baghouse stack and with the PE and PM_{10} 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 PM_{10} - 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 - shelfline PLANT 2 DUST COLLECTORS.XLS SHELF LINES **Dust Collection Sizes and Reading**				
For:		FLOOR AND SHELF LINES		
EPA ID#		**P010**		
KMC Asset #		**P2-10904**		
DUST COLLECTOR #2				
Date: 5/2006	KraftMaid Design Velocity =		4800	
Fan Motor FLA				
As Of 8/2/07		Fan Motor Amps		
Motor running	#DIV/0!	Loaded	CFM Running Total	
Equipment 125 HP 119.9 BHP 765 RPM Fan inlet 37"	**36432**	MAX CFM @ 4800v	**43144**	
36432 Max CFM @ 4800v 11" SP				
Size of pipe in inches		Amount of CFM in pipe		
WALL-END LINE				
WEIMA GRINDER	8	HM	1675	1675
BASE END LINE	0		1675	

DET BASE LINE	6	HM	942	2618
DET BASE LINE	6	HM	942	3560
DET BASE LINE	10	HM	2618	6178
DET BASE LINE	10	HM	2618	8796
DET BASE LINE	5	HM	654	9451
DET BASE LINE	5	HM	654	10105
DET BASE LINE	10	HM	2618	12723
DET BASE LINE	10	HM	2618	15341
DET BASE LINE	11	HM	3168	18509
DET BASE LINE	11	HM	3168	21677
FLOOR LINE	0		21677	
BRUSH	6	HM	942	22619
BRUSH	6	HM	942	23562
SINGLE-SIDED EDGEBANDER	5	HM	654	24216
SINGLE-SIDED EDGEBANDER	7	HM	1283	25499
SINGLE-SIDED EDGEBANDER	8	HM	1675	27174
SHELF LINE	0		27174	
BRUSH	6	HM	942	28117
BRUSH	6	HM	942	29059
SINGLE-SIDED EDGEBANDER	5	HM	654	29714
SINGLE-SIDED EDGEBANDER	7	HM	1283	30997
SINGLE-SIDED EDGEBANDER	8	HM	1675	32672
HEAVY MILLING	0		32672	
FLOOR AND CEILING NOTCHER	5	HM	654	33327
FLOOR AND CEILING NOTCHER	5	HM	654	33981
HOLZMA #4	5	HM	654	34636
HOLZMA #4	5	HM	654	35290
HOLZMA #4	8	HM	1675	36966
NFL 26 10464	5	HM	654	37620
NFL 26 10464	5	HM	654	38275
NFL 26 10464	5	HM	654	38929
NFL 26 10464	5	HM	654	39584
NFL 26 10464	6	HM	942	40526
NFL 26 10464	6	HM	942	41469
NFL 26 10464	4	HM	419	41887
NFL 26 10464	4	HM	419	42306
NFL 26 10464	4	HM	419	42725
NFL 26 10464	4	HM	419	43144

P012 - walline P2 Dust Master 2009 Annual Report 2/1/2010 1:52 PM P012 - walline

Dust Collection Sizes and Reading

For:			WALL END LINE		
EPA ID#			**P012**		
KMC Asset #			**P2-10903**		
DUST COLLECTOR #1					
Date: 5/2006		KraftMaid Design Velocity =		4800	
Fan Motor FLA			145		
As Of 5/1/09		Fan Motor Amps		106	
Motor running	73%		Loaded	CFM Running Total	
Equipment 125 HP 119.9 BHP 765 RPM Fan inlet 37"	**36432**		MAX CFM @ 4800v	**40945**	
36432 Max CFM @ 4800v 11" SP					
Size of pipe in inches			Amount of CFM in pipe		
BASE END LINE					
1	KOCH TOE NOTCH	3	HM	236	236
2	KOCH TOE NOTCH	3	HM	236	471

3	KOCH TOE NOTCH	3	HM	236	707
4	KOCH TOE NOTCH	3	HM	236	942
5	KOCH TOE NOTCH	5	HM	654	1597
6	BRUSH	6	HM	942	2539
7	BRUSH	6	HM	942	3482
8	WEEKE #819 BST 100	6	HM	942	4424
WALL END LINE		0		4424	
9	BRUSH	6	HM	942	5367
10	BRUSH	6	HM	942	6309
11	DET	9	HM	2121	8430
12	DET	9	HM	2121	10550
13	WEEKE BST 100	6	HM	942	11493
14	EDGEBANDER	5	HM	654	12147
15	EDGEBANDER	5	HM	654	12802
16	EDGEBANDER	7	HM	1283	14085
17	EDGEBANDER	7	HM	1283	15367
18	EDGEBANDER	10	HM	2618	17985
19	EDGEBANDER	10	HM	2618	20603
20	DET	9	HM	2121	22724
21	DET	9	HM	2121	24845
HEAVY MILL		0		24845	
22	WEEKE BST 500	6	HM	942	25787
23	HOMAG 10/12 EDGE BANDER	5	HM	654	26441
24	HOMAG 10/12 EDGE BANDER	5	HM	654	27096
25	HOMAG 10/12 EDGE BANDER	4	HM	419	27515
26	HOMAG 10/12 EDGE BANDER	4	HM	419	27934
27	HOMAG 10/12 EDGE BANDER	3	HM	236	28169
28	OPTIMAT EDGEBANDER	5	HM	654	28824
29	OPTIMAT EDGEBANDER	5	HM	654	29478
30	OPTIMAT EDGEBANDER	10	HM	2618	32096
31	OPTIMAT EDGEBANDER	10	HM	2618	34714
32	BST 500 10475	6	HM	942	35657
33	BST 500 10475	6	HM	942	36599
34	BP-12	7	HM	1283	37882
35	NOTCHER	4	HM	419	38301
36	NOTCHER	4	HM	419	38720
37	BHC350	7	HM	1283	40003
38	WEIMA GRINDER	6	HM	942	40945

5. Emissions Unit Group - P011 and P015: P011, P015,

EU ID	Operations, Property and/or Equipment Description
P011	Woodworking equipment exhausting to a 31,150 cfm baghouse, MASCO ID P2-10909
P015	Woodworking equipment exhausting to a 31,150 cfm baghouse, MASCO ID P2-10912

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) 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. Visible particulate emissions (PE) from the baghouse 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.
c.	OAC rule 3745-17-11(B) OAC rule 3745-17-07(A)	The requirements established pursuant to OAC rules 3745-17-11(B) and 3745-17-

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		07(A) are less stringent than the requirements established pursuant to OAC rules 3745-31-05(D)(1)(b) and OAC rule 3745-31-05(A).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The pressure drop across the baghouse shall be maintained within the range of 1 to 5 inches of water while the emissions unit is in operation. The listed pressure drop range applies at all times except following rebagging until sufficient filter cake has developed on the bags.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

(2) 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.

(3) 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 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.

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director 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. The PER shall include any deviations from the monitored pressure drop across the baghouse as well as the information required in e)(1) above.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1)a and (b)(1)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 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

PE shall not exceed 1.34 pounds per hour and 5.85 tons per year.

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated based upon the methods and procedures specified in OAC rule 3745-17-03(B)(10) and the requirements specified in f)(2).

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (1.34 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs 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:

PM_{10} emissions shall not exceed 0.67 pound per hour and 2.92 tons per year.

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 51, Appendix M, Method 201 and the requirements specified in f)(2).

The tpy emission limitation was developed by multiplying the short-term allowable PM_{10} emission limitation (0.67 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation:

Emissions of PM_{10} shall not exceed 0.0025 grain per dscf of exhaust gases from the baghouse stack.

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

Applicable Compliance Method:

Compliance 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 40 CFR Part 51, Appendix M, Method 201 for PM_{10} and the requirements specified in f)(2).

(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 beginning in 2011. 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.

b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 0.005 grain per dscf and 0.0025 grain PM_{10} per dscf from the baghouse stack and with the PE and PM_{10} 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 PM_{10} - 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.

P011 - dodds uv2 PLANT 2 DUST COLLECTORS.XLS DODDS MACHINES AND UV#2

Dust Collection Sizes and Reading

For:			DODDS MACHINES AND UV#2		
EPA ID#			**P011**		
KMC Asset #			**P2-10909**		
DUST COLLECTOR #7					
Date: 9/2006		KraftMaid Design Velocity =		5200	
Fan Motor FLA			118		
As Of 02/02/09		Fan Motor Amps		110	
Motor running	93%		Loaded		CFM Running Total
Equipment 100 HP 91.4 BHP 825 RPM Fan inlet 33"	**31,150**		MAX CFM @ 5200v		**32133**
31150 Max CFM @ 5200v 9" SP					
SIZE OF PIPE IN INCHES			AMOUNT OF CFM IN PIPE		
UV #2					
1	TIMESAVERS SANDER (1)	6	UV-2	1021	1021
2	TIMESAVERS SANDER (1)	7	UV-2	1390	2411
3	TIMESAVERS SANDER (1)	7	UV-2	1390	3800
4	TIMESAVERS SANDER (1)	8	UV-2	1815	5616
5	TIMESAVERS	8	UV-2	1815	7431

	SANDER (1)				
6	TIMESAVERS SANDER (1)	8	UV-2	1815	9246
7	TIMESAVERS SANDER (2)	10	UV-2	2836	12082
8	TIMESAVERS SANDER (2)	8	UV-2	1815	13897
9	TIMESAVERS SANDER (2)	7	UV-2	1390	15287
10	TIMESAVERS SANDER (2)	6	UV-2	1021	16308
11	SORBINI EDGE COATER	5	UV-2	709	17017
12	SORBINI EDGE COATER	5	UV-2	709	17726
13	SORBINI EDGE COATER	4	UV-2	454	18180
14	SORBINI EDGE COATER	4	UV-2	454	18633
15	SORBINI EDGE COATER	4	UV-2	454	19087
16	SORBINI EDGE COATER	4	UV-2	454	19541
17	NOTCHER	4	DODDS	454	19995
18	NOTCHER	6	DODDS	1021	21016
19	DODDS DOVETAIL P2-501	6	DODDS	1021	22037
20	DODDS DOVETAIL P2-501	6	DODDS	1021	23058
21	DODDS DOVETAIL P2-915	6	DODDS	1021	24079
22	DODDS DOVETAIL P2-915	6	DODDS	1021	25100
23	DODDS DOVETAIL P2-500	6	DODDS	1021	26121
24	DODDS DOVETAIL P2-500	6	DODDS	1021	27142
25	DODDS DOVETAIL P2-973	6	DODDS	1021	28163
26	DODDS DOVETAIL P2-973	6	DODDS	1021	29184
27	DODDS SIDE MACHINE #54	4	DODDS	454	29638
28	DODDS SIDE MACHINE #54	4	DODDS	454	30091
29	DODDS DE-790 CNC SER # DO6012-164	6	DODDS	1021	31112
30	DODDS DE-790 CNC SER # DO6012-165	6	DODDS	1021	32133

P015 - uv1 PLANT 2 DUST COLLECTORS.XLS UV#1

Dust Collection Sizes and Reading

For:		UV #1	
EPA ID#		**P015**	
KMC Asset #		**P2-10912**	
DUST COLLECTOR #10			
Date: 5/2006		KraftMaid Design Velocity =	5200
Fan Motor FLA		118	
As Of 8/2/07		Fan Motor Amps	90
Motor running	76%	Loaded	CFM Running Total

Equipment 100 HP 91.4 BHP 825 RPM Fan inlet 33"	**31150**		MAX CFM @ 5200v	**25156**	
31150 Max CFM @ 4800v 9" SP					
SIZE OF PIPE IN INCHES			Amount of CFM in pipe		
UV #1					
1	HEESMANN SANDER LSM 8	6	UV	1021	1021
2	HEESMANN SANDER LSM 8	6	UV	1021	2042
3	HEESMANN SANDER LSM 8	6	UV	1021	3063
4	HEESMANN SANDER LSM 8	7	UV	1390	4453
5	HEESMANN SANDER LSM 8	7	UV	1390	5842
6	HEESMANN SANDER LSM 8	7	UV	1390	7232
7	HEESMANN SANDER LSM 8	7	UV	1390	8622
8	HEESMANN SANDER LSM 8	7	UV	1390	10012
9	HEESMANN SANDER LSM 8	7	UV	1390	11401
10	HEESMANN SANDER LSM 8	9	UV	2297	13699
11	HEESMANN SANDER LSM 8 (2)	6	UV	1021	14720
12	HEESMANN SANDER LSM 8 (2)	6	UV	1021	15741
13	HEESMANN SANDER LSM 8 (2)	6	UV	1021	16762
14	HEESMANN SANDER LSM 8 (2)	6	UV	1021	17783
15	HEESMANN SANDER LSM 8 (2)	7	UV	1390	19172
16	HEESMANN SANDER LSM 8 (2)	7	UV	1390	20562
17	HEESMANN SANDER LSM 8 (2)	7	UV	1390	21952
18	HEESMANN SANDER LSM 8 (2)	7	UV	1390	23341
19	HEESMANN SANDER LSM 8 (2)	8	UV	1815	25156

6. Emissions Unit Group - P6-8, 14, 19-21: P006, P007, P008, P014, P019, P020 and P021

EU ID	Operations, Property and/or Equipment Description
P006	Woodworking equipment exhausting to a 39,400 cfm baghouse, MASCO ID P2-10916
P007	Woodworking equipment exhausting to a 39,400 cfm baghouse, MASCO ID P2-10911
P008	Woodworking equipment exhausting to a 39,400 cfm baghouse, MASCO ID P2-21588
P014	Woodworking equipment exhausting to a 39,400 cfm baghouse, MASCO ID P2-10905
P019	Woodworking equipment exhausting to a 39,400 cfm baghouse, MASCO ID P2-10918
P020	Woodworking equipment exhausting to a 39,400 cfm baghouse, MASCO ID P2-10915
P021	Woodworking equipment exhausting to a 39,400 cfm baghouse, MASCO ID P2-10917

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) 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 0.84 pound per hour and 3.70 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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		stack. PE shall not exceed 1.69 pounds per hour and 7.40 tons per year from the baghouse stack.
c.	OAC rule 3745-17-11(B) OAC rule 3745-17-07(A)	The requirements established pursuant to OAC rules 3745-17-11(B) and 3745-17-07(A) 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. None.

c) Operational Restrictions

(1) The pressure drop across the baghouse shall be maintained within the range of 1 to 5 inches of water while the emissions unit is in operation. The listed pressure drop range applies at all times except following rebagging until sufficient filter cake has developed on the bags.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

(2) 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.

(3) 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 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.

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director 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. The PER shall include any deviations from the monitored pressure drop across the baghouse as well as the information required in e)(1) above.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1)a and b)(1)b of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

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

<u>Applicable Compliance Method</u>:

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 and OAC rule 3745-17-03(B)(1).

b. <u>Emission Limitation</u>:

PE shall not exceed 1.69 pounds per hour and 7.40 tons per year from the baghouse stack.

<u>Applicable Compliance Method</u>:

Compliance with the hourly limitation shall be demonstrated based upon the methods and procedures specified in OAC rule 3745-17-03(B)(10) and the requirements specified in f)(2).

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (1.69 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs 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:

PM_{10} emissions shall not exceed 0.84 pound per hour and 3.70 tons per year from the baghouse stack.

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 51, Appendix M, Method 201 and the requirements specified in f)(2).

The tpy emission limitation was developed by multiplying the short-term allowable PM_{10} emission limitation (0.84 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation:

Emissions of PM_{10} shall not exceed 0.0025 grain per dscf of exhaust gases from the baghouse stack.

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

Applicable Compliance Method:

Compliance 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 40 CFR Part 51, Appendix M, Method 201 for PM_{10} and the requirements specified in f)(2).

(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; 36,000 cfm – 39,999 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 36,000 cfm and 39,999 cfm are part of this group.

Plant 1
None

Plant 2
P006 (P2-10916) – 39,400 cfm
P007 (P2-10911) – 39,400 cfm
P008 (P2-21588) – 39,400 cfm
P010 (P2-10904) – 36,432 cfm
P012 (P2-10903) – 36,432 cfm
P014 (P2-10905) – 39,400 cfm
P019 (P2-10918) – 39,400 cfm
P020 (P2-10915) – 39,400 cfm
P021 (P2-10917) – 39,400 cfm

Plant 3
P001 (P3-20865) – 36,432 cfm

One of the emissions units from this group shall be selected for emissions testing every five years beginning in 2012. 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.

b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 0.005 grain per dscf and 0.0025 grain PM_{10} per dscf from the baghouse stack and with the PE and PM_{10} 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 PM_{10} - 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.

P006 - uv3 PLANT 2 DUST COLLECTORS.XLS UV# 3 **Dust Collection Sizes and Reading**		
For:	UV#3 / KAAT MINI MILL	
EPA ID#	**P006**	
KMC Asset #	**P2-10916**	
DUST COLLECTOR #14		
Date: 5/2006	KraftMaid Design Velocity =	5200
Fan Motor FLA	171	

As Of 8/2/07			Fan Motor Amps	128	
Motor running		75%	Loaded		CFM Running Total
Equipment 150 HP 142 BHP 801 RPM Fan inlet 37"		**39400**	MAX CFM @ 4900v		**42372**
39400 Max CFM @ 5200v 12" SP					
Size of pipe in inches			Amount of CFM in pipe		
UV #3					
1	BRUSH CLEANER	8	UV-3	1815	1815
2	BRUSH CLEANER	8	UV-3	1815	3630
3	BRUSH CLEANER	8	UV-3	1815	5445
4	BRUSH CLEANER	8	UV-3	1815	7260
5	BRUSH CLEANER	10	UV-3	2836	10097
6	HEESEMANN LSM 8 (1)	5	UV-3	709	10806
7	HEESEMANN LSM 8 (1)	5	UV-3	709	11515
8	HEESEMANN LSM 8 (1)	6	UV-3	1021	12536
9	HEESEMANN LSM 8 (1)	7	UV-3	1390	13925
10	HEESEMANN LSM 8 (1)	7	UV-3	1390	15315
11	HEESEMANN LSM 8 (1)	7	UV-3	1390	16705
12	HEESEMANN LSM 8 (1)	7	UV-3	1390	18095
13	HEESEMANN LSM 8 (1)	7	UV-3	1390	19484
14	HEESEMANN LSM 8 (1)	7	UV-3	1390	20874
15	HEESEMANN LSM 8 (1)	8	UV-3	1815	22689
16	HEESEMANN LSM 8 (2)	5	UV-3	709	23398
17	HEESEMANN LSM 8 (2)	5	UV-3	709	24107
18	HEESEMANN LSM 8 (2)	6	UV-3	1021	25128
19	HEESEMANN LSM 8 (2)	6	UV-3	1021	26149
20	HEESEMANN LSM 8 (2)	6	UV-3	1021	27170
21	HEESEMANN LSM 8 (2)	7	UV-3	1390	28560
22	HEESEMANN LSM 8 (2)	7	UV-3	1390	29950
23	HEESEMANN LSM 8 (2)	7	UV-3	1390	31339
24	HEESEMANN LSM 8 (2)	8	UV-3	1815	33154
25	BP12	8	MINI MILL	1815	34969
26	BP120	5	MINI MILL	709	35679
27	BP120	5	MINI MILL	709	36388
28	BP120	6	MINI MILL	1021	37409
29	TOE KICK NOTCHER	4	MINI MILL	454	37862
30	TOE KICK NOTCHER	4	MINI MILL	454	38316
31	KL-73 EDGEBANDER P2-467	6	MINI MILL	1021	39337
32	TOE KICK NOTCHER	4	MINI MILL	454	39791
33	TOE KICK NOTCHER	4	MINI MILL	454	40245
34	ALTENDORF TABLE SAW	5	MINI MILL	709	40954
35	ALTENDORF TABLE SAW	5	MINI MILL	709	41663
36	ALTENDORF TABLE SAW	5	MINI MILL	709	42372

P007 - sp saws PLANT 2 DUST COLLECTORS.XLS SP SAWS

Dust Collection Sizes and Reading

For:			SPECIAL PARTS		
EPA ID#			**P007**		
KMC Asset #			**P2-10911**		
DUST COLLECTOR #9					
Date: 9/2006			KraftMaid Design Velocity =	5200	
Fan Motor FLA			171		
As Of 8/2/07			Fan Motor Amps	130	
Motor running		76%	Loaded		CFM Running Total
Equipment 150 HP 142 BHP 801 RPM Fan inlet 37"		**39400**	MAX CFM @ 5200v		**36813**
39400 Max CFM @ 5200v 12" SP					
Size of pipe in inches			Amount of CFM in pipe		
MILLING					
1	HOLZMA #7	6	MILL	1021	1021

2	HOLZMA #7	8	MILL	1815	2836
5	HOLZMA #6	6	MILL	1021	3857
6	HOLZMA #6	8	MILL	1815	5672
7	ALTENDORF TABLE SAW	6	MILL	1021	6693
8	POWERMATIC SAW	5	MILL	709	7402
9	DODDS F&B DOVETAIL (OLD)	6	MILL	1021	8423
10	DODDS F&B DOVETAIL (OLD)	6	MILL	1021	9444
11	HOLZMA #5	6	MILL	1021	10465
12	HOLZMA #5	6	MILL	1021	11486
13	HOLZMA #5	8	MILL	1815	13301
14	ROUTER	4	MILL	454	13755
15	PIN ROUTER	4	MILL	454	14209
16	WEIMA GRINDER	10	MILL	2836	17045
17	MOUSE GROOVER	3	MILL	255	17300
18	MOUSE GROOVER	3	MILL	255	17556
19	MOUSE GROOVER	3	MILL	255	17811
20	MOUSE GROOVER	3	MILL	255	18066
21	NFL 26 21322	5	MILL	709	18775
22	NFL 26 21322	5	MILL	709	19484
23	NFL 26 21322	5	MILL	709	20193
24	NFL 26 21322	5	MILL	709	20902
25	NFL 26 21322	6	MILL	1021	21923
26	NFL 26 21322	6	MILL	1021	22944
27	NFL 26 21322	4	MILL	454	23398
28	NFL 26 21322	4	MILL	454	23852
29	NFL 26 21322	4	MILL	454	24306
30	NFL 26 21322	4	MILL	454	24759
31	HOLZMA #25	8	MILL	1815	26575
32	HOLZMA #25	6	MILL	1021	27596
33	BST 500 22192	6	MILL	1021	28617
34	BST 500 22192	6	MILL	1021	29638
35	TABLE SAW 243	4	MILL	454	30091
36	GROOVER P2-88	4	MILL	454	30545
36	NOTCHER	4	MILL	454	30999
37	NOTCHER	4	MILL	454	31453
38	NOTCHER	6	MILL	1021	32474
39	ALTENDORF TABLE SAW #776	5	MILL	709	33183
40	OPTIMAT BP-12	8	MILL	1815	34998
41	DODDS MANUAL MACHINE #54	4	MILL	454	35452
42	DODDS MANUAL MACHINE #54	4	MILL	454	35905
43	DODDS MANUAL MACHINE #55	4	MILL	454	36359
44	DODDS MANUAL MACHINE #55	4	MILL	454	36813

P008 - white door PLANT 2 DUST COLLECTORS.XLS WHITE DOOR

Dust Collection Sizes and Reading

For:			WHITE DOOR CELL AND EURO		
EPA ID#			**P008**		
KMC Asset #			**P2-21588**		
DUST COLLECTOR #21					
Date: 5/2006		KraftMaid Design Velocity =		5200	
Fan Motor FLA			171		
As Of 8/2/07		Fan Motor Amps		110	
Motor running	64%		Loaded		CFM Running Total
Equipment 150 HP 142 BHP 801 RPM Fan inlet 37"	**39400**		0 MAX CFM @ 5200v		**20137**
39400 Max CFM @ 5200v 12" SP					
Size of pipe in inches			Amount of CFM in pipe		
1	WEIMA GRINDER	8	WHITE DOOR	1815	1815
2	HOLZMA SAW HPP 22	8	WHITE DOOR	1815	3630
3	HOLZMA SAW HPP 22	6	WHITE DOOR	1021	4651
4	HOLZMA SAW HPP 22	6	WHITE DOOR	1021	5672

5	ALTENDORF SAW	5	WHITE DOOR	709	6381
6	ALTENDORF SAW	5	WHITE DOOR	709	7090
7	HEAIN ROUTER #4	8	WHITE DOOR	1815	8905
8	HEAIN ROUTER #5	8	WHITE DOOR	1815	10721
9	BLUM MINI PRESS	4	WHITE DOOR	454	11174
10	BHC 250	8	EURO	1815	12989
11	BHC350	8	EURO	1815	14805
12	BHC 350	6	EURO	1021	15826
13	BHC 350	8	EURO	1815	17641
14	BHC 350	6	EURO	1021	18662
15	PRESS ROOM	6	WHITE DOOR	1021	19683
16	HINGE PRESS	4	WHITE DOOR	454	20137

P014 - holzma saws PLANT 2 DUST COLLECTORS.XLS HOLZMA SAWS

Dust Collection Sizes and Reading

For:		HOLZMA SAWS	
EPA ID#		**P014**	
KMC Asset #		**P2-10905**	
DUST COLLECTOR #03			
Date: 5/2006	KraftMaid Design Velocity =	5200	
Fan Motor FLA			
As Of 8/2/07		Fan Motor Amps	
Motor running	#DIV/0!	Loaded	CFM Running Total
Equipment 150 HP 142 BHP 801 RPM Fan inlet 37"	**36432**	MAX CFM @ 5200v	**20704**
39400 Max CFM @ 5200v 12" SP			
SIZE OF PIPE IN INCHES		Amount of CFM in pipe	

HEAVY MILLING

1	WEIMA GRINDER P2-921	10	HM	2836	2836
2	HOLZMA #3	3	HM	255	3091
3	HOLZMA #3	6	HM	1021	4112
4	HOLZMA #3	6	HM	1021	5133
5	HOLZMA #3	8	HM	1815	6949
6	NOTCHER	4	HM	454	7402
7	NOTCHER	4	HM	454	7856
8	HOLZMA #2	3	HM	255	8111
9	HOLZMA #2	3	HM	255	8367
10	HOLZMA #2	6	HM	1021	9388
11	HOLZMA #2	6	HM	1021	10409
12	HOLZMA #2	6	HM	1021	11430
13	HOLZMA #2	8	HM	1815	13245
14	HOLZMA #1	3	HM	255	13500
15	HOLZMA #1	3	HM	255	13755
16	HOLZMA #1	3	HM	255	14010
17	HOLZMA #1	6	HM	1021	15031
18	HOLZMA #1	6	HM	1021	16052
19	HOLZMA #1	6	HM	1021	17074
20	HOLZMA #1	8	HM	1815	18889
21	HOLZMA #1	8	HM	1815	20704

P019 - premier 2 PLANT 2 DUST COLLECTORS.XLS EURO PREMIER 2

Dust Collection Sizes and Reading

For:	EURO PREMIER AREA

EPA ID#			**P019**		
KMC Asset #			**P2-10918**		
DUST COLLECTOR #16					
Date: 5/2006		KraftMaid Design Velocity =		5200	
Fan Motor FLA			171		
As Of 8/2/07		Fan Motor Amps		130	
Motor running	76%	Loaded		CFM Running Total	
Equipment 150 HP 142 BHP 801 RPM Fan inlet 37"	**39400**	MAX CFM @ 5200v		**27794**	
39400 Max CFM @ 5200v 12" SP					
SIZE OF PIPE IN INCHES			Amount of CFM in pipe		
EURO PREMIER TWO					
1	HOLZMA #53	6	EURO	1021	1021
2	HOLZMA #53	8	EURO	1815	2836
3	HOLZMA #54	6	EURO	1021	3857
4	HOLZMA #54	8	EURO	1815	5672
5	OPTIMAT KFL 526	5	EURO	709	6381
6	OPTIMAT KFL 526	5	EURO	709	7090
7	OPTIMAT KFL 526	5	EURO	709	7799
8	OPTIMAT KFL 526	5	EURO	709	8508
9	OPTIMAT KFL 526	5	EURO	709	9217
10	OPTIMAT KFL 526	5	EURO	709	9926
11	OPTIMAT KFL 526	5	EURO	709	10635
12	OPTIMAT KFL 526	5	EURO	709	11345
13	OPTIMAT KFL 526	5	EURO	709	12054
14	OPTIMAT KFL 526	5	EURO	709	12763
15	OPTIMAT KFL 526	5	EURO	709	13472
16	OPTIMAT KFL 526	5	EURO	709	14181
17	OPTIMAT KFL 526	5	EURO	709	14890
18	OPTIMAT KFL 526	5	EURO	709	15599
19	BHC 350	7	EURO	1390	16988
20	BHC 350	7	EURO	1390	18378
21	BHT 500	8	EURO	1815	20193
22	TOE KICK	4	EURO	454	20647
23	TOE KICK	4	EURO	454	21101
24	TOE KICK	4	EURO	454	21555
25	TOE KICK	4	EURO	454	22008
26	NFL-26 940	4	EURO	454	22462
27	NFL-26 940	5	EURO	709	23171
28	NFL-26 940	5	EURO	709	23880
29	NFL-26 940	6	EURO	1021	24901
30	NFL-26 941	4	EURO	454	25355
31	NFL-26 941	5	EURO	709	26064
32	NFL-26 941	5	EURO	709	26773
33	NFL-26 941	6	EURO	1021	27794

P020 - bp area PLANT 2 DUST COLLECTORS.XLS BP LINE COLLECTORS

Dust Collection Sizes and Reading

For:			BP LINE COLLECTORS	
EPA ID#			**P020**	
KMC Asset #			**P2-10915**	
DUST COLLECTOR #13				
Date: 5/2006		KraftMaid Design Velocity =		5200
Fan Motor FLA			171	
As Of 8/2/07		Fan Motor Amps		110
Motor running	64%	Loaded		CFM Running Total
Equipment 150 HP 142 BHP 801 RPM Fan inlet 37"	**39400**	MAX CFM @ 5200v		**40528**

39400 Max CFM @ 5200v 12" SP					
1128		SIZE OF PIPE IN INCHES		Amount of CFM in pipe	
BP MACHINES					
1	TOE KICK (AT TPT21)	5	BP	709	709
2	TOE KICK (AT TPT21)	5	BP	709	1418
3	PTP21 BHC 555	10	BP	2836	4254
4	PTP21 BHC 555	7	BP	1390	5644
5	PTP21 BHC 555	7	BP	1390	7034
6	PTP22 BHC 555	10	BP	2836	9870
7	PTP22 BHC 555	7	BP	1390	11259
8	PTP22 BHC 555	7	BP	1390	12649
9	TOE KICK (AT TPT23)	4	BP	454	13103
10	TOE KICK (AT TPT23)	4	BP	454	13557
11	PTP23 BHC 555	10	BP	2836	16393
12	PTP23 BHC 555	7	BP	1390	17783
13	PTP23 BHC 555	7	BP	1390	19172
14	PTP24 BHC 555	10	BP	2836	22008
15	PTP24 BHC 555	7	BP	1390	23398
16	PTP24 BHC 555	7	BP	1390	24788
17	TOE KICK (AT PTP25)	4	BP	454	25242
18	TOE KICK (AT PTP25)	4	BP	454	25695
19	PTP25 BP12	8	BP	1815	27510
20	PTP26 BP 120	8	BP	1815	29326
21	TOE KICK (AT PTP27)	4	BP	454	29779
22	TOE KICK (AT PTP27)	4	BP	454	30233
23	PTP27 BP 120	8	BP	1815	32048
24	PTP28 BP 120	8	BP	1815	33863
25	TOE KICK (AT PTP29)	4	BP	454	34317
26	TOE KICK (AT PTP29)	4	BP	454	34771
27	PTP29 BP120	8	BP	1815	36586
28	PTP30 BP12	8	BP	1815	38401
29	ALTENDORF	5	BP	709	39110
30	ALTENDORF	5	BP	709	39819
31	ALTENDORF	5	BP	709	40528

P021 - premier 1 PLANT 2 DUST COLLECTORS.XLS EURO PREMIER 1

Dust Collection Sizes and Reading

For:		EURO PREMIER AREA	
EPA ID#		**P021**	
KMC Asset #		**P2-10917**	
DUST COLLECTOR #15			
Date: 5/2006		KraftMaid Design Velocity =	5200
Fan Motor FLA		171	
As Of 8/2/07		Fan Motor Amps	123
Motor running	72%	Loaded	CFM Running Total
Equipment 150 HP 142 BHP 801 RPM Fan inlet 37"	**39400**	MAX CFM @ 5200v	**41549**
39400 Max CFM @ 5200v 12" SP			
SIZE OF PIPE IN INCHES		Amount of CFM in pipe	
EURO PREMIER ONE			

1	HOLZMA #51	6	EURO	1021	1021
2	HOLZMA #51	8	EURO	1815	2836
3	HOLZMA #52	7	EURO	1390	4226
4	HOLZMA #52	8	EURO	1815	6041
5	Weima Grinder	10	EURO	2836	8877
6	KRF-23 U-SHAPE LINE	8	EURO	1815	10692
7	KRF-23 U-SHAPE LINE	6	EURO	1021	11713
8	KRF-23 U-SHAPE LINE	6	EURO	1021	12734
9	KRF-23 U-SHAPE LINE	6	EURO	1021	13755
10	KRF-23 U-SHAPE LINE	6	EURO	1021	14776
11	KRF-23 U-SHAPE LINE	6	EURO	1021	15797
12	KRF-23 U-SHAPE LINE	6	EURO	1021	16818
13	KRF-23 U-SHAPE LINE	6	EURO	1021	17839
14	KRF-23 U-SHAPE LINE	6	EURO	1021	18860
15	KRF-23 U-SHAPE LINE	6	EURO	1021	19881
16	KRF-23 U-SHAPE LINE	6	EURO	1021	20902
17	KRF-23 U-SHAPE LINE	6	EURO	1021	21923
18	KRF-23 U-SHAPE LINE	6	EURO	1021	22944
19	KRF-23 U-SHAPE LINE	6	EURO	1021	23965
20	KRF-23 U-SHAPE LINE	6	EURO	1021	24986
21	KRF-23 U-SHAPE LINE	6	EURO	1021	26007
22	KRF-23 U-SHAPE LINE	6	EURO	1021	27028
23	KRF-23 U-SHAPE LINE	6	EURO	1021	28049
24	KRF-23 U-SHAPE LINE	6	EURO	1021	29070
25	KRF-23 U-SHAPE LINE	4	EURO	454	29524
26	OPTIMAT KAL 310 EDGEBANDER	5	EURO	709	30233
27	OPTIMAT KAL 310 EDGEBANDER	5	EURO	709	30942
28	BHT-500	6	EURO	1021	31963
29	BHT-500	6	EURO	1021	32984
30	BHT-500	6	EURO	1021	34005
31	BHT-500	6	EURO	1021	35026
32	HOLZMA HPP 380 SAW	6	EURO	1021	36047
33	HOLZMA HPP 380 SAW	8	EURO	1815	37862
34	BEK-100	4	EURO	454	38316
35	BEK-100	4	EURO	454	38770
35	BEK-100	4	EURO	454	39224
37	BEK-100	4	EURO	454	39677
38	BEK-100	4	EURO	454	40131
39	OPTIMAT KAL310 EDGEBANDER	5	EURO	709	40840
40	OPTIMAT KAL 310 EDGEBANDER	5	EURO	709	41549