



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION  
GEAUGA COUNTY**

**CERTIFIED MAIL**

Street Address:

50 West Town Street, Suite 700

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 02-20471**

**Fac ID: 0228000186**

**DATE: 4/17/2007**

KraftMaid Cabinetry Inc  
Bennett Wetzel  
PO Box 1055 15535 South State St  
Middlefield, OH 44062-1055

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

You are hereby notified that this action of the Director is final 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 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

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

NEDO



**Permit To Install  
Terms and Conditions**

**Issue Date: 4/17/2007  
Effective Date: 4/17/2007**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 02-20471

Application Number: 02-20471  
Facility ID: 0228000186  
Permit Fee: **\$500**  
Name of Facility: KraftMaid Cabinetry Inc  
Person to Contact: Bennett Wetzel  
Address: PO Box 1055 15535 South State St  
Middlefield, OH 44062-1055

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**16052 Industrial Parkway  
Middlefield, Ohio**

Description of proposed emissions unit(s):  
**Modification of emissions testing requirements.**

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director

**Part I - GENERAL TERMS AND CONDITIONS****A. Permit to Install General Terms and Conditions****1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

**2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**3. Records Retention Requirements**

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

**4. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon

the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**9. Construction of New Sources(s)**

**KraftMaid Cabinetry Inc**  
**PTI Application: 02-20471**  
**Modification Issued: 4/17/2007**

**Facility ID: 022800018**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

#### **10. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

#### **11. Applicability**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

#### **12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**KraftMaid Cabinetry Inc**  
**PTI Application: 02-20471**  
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**13. Source Operation and Operating Permit Requirements After Completion of Construction**

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

**14. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

**B. Permit to Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)  
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	35.268
PM-10	17.938

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**KraftMaid Cabinetry Inc**  
**PTI Application: 02-20471**  
**Modification Issued: 4/17/2007**

**Facility ID: 022800018**

**Kraftl**

**PTI A**

**Modification Issued: 4/17/2007**

Emissions Unit ID: **P008**

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

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

OAC rule 3745-17- 08 (B)  
 OAC rule 3745-17-07 (B)

Operations, Property,  
 and/or Equipment

Applicable Rules/Requirements

P008 consists of all  
 woodworking equipment vented  
 to P1-13325 (former facility id  
 was P1-220), a 53,000 cfm  
 baghouse.

OAC rule 3745-31-05 (A)(3)

See attached Table P1-P8.  
 (P1 is Plant 1.)

Modification

OAC rule 3745-17-11 (B)  
 OAC rule 3745-17-07 (A)(1)

**Kraftl****PTI A****Modification Issued: 4/17/2007**Emissions Unit ID: **P008**

Applicable Emissions  
Limitations/Control Measures

0.005 grain Particulate  
Emissions (PE) per dscf and  
0.0025 grain PM-10 per dscf  
from the baghouse stack

2.27 lbs PE/hour and 9.95 tons  
per year from the baghouse  
stack

1.14 lbs PM-10 per hour and  
4.97 tons per year from the  
baghouse stack

0% visible emissions from the  
baghouse stack, as a  
six-minute average

0.50 ton fugitive PE per year  
and 0.50 ton fugitive PM-10 per  
year from loading sawdust into  
trucks

10% visible fugitive emissions  
from loading sawdust into  
trucks, as a three-minute  
average

See A.2.b.

See A.2.b.

See A.2.b.

See A.2.b.

**2. Additional Terms and Conditions**

**2.a** This permit to install (PTI 02-20471) includes the following tables:

Table P1-P8 P1-13325	P008 - Emission Units which are vented to Baghouse
Table P1-P9 P1-13327	P009 - Emission Units which are vented to Baghouse
Table P1-P10 P1-13326	P010 - Emission Units which are vented to Baghouse
Table P1-P11 P1-13324	P011 - Emission Units which are vented to Baghouse
Table P1-P12 P1-13322	P012 - Emission Units which are vented to Baghouse
Table P1-P13 P1-13323	P013 - Emission Units which are vented to Baghouse
Table P1-A	All PTI exempt Emissions Units

**2.b** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-03(A)(3).

**B. 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 is developed on the bags.
2. The facility shall retain the option to install a bag leak detector. Should this option be chosen, the bag leak detector shall be properly installed and calibrated, operated and maintained. An audible alarm shall be installed to sound should emissions above the percent saturation, determined during the calibration testing, be exceeded. The requirement to operate this emissions unit within the pressure drop range of 1 to 5 inches of water shall be vacated under this option.

**C. Monitoring and/or Record keeping 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

**Modification Issued: 4/17/2007**

manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a weekly 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. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible emissions of fugitive dust from the sawdust loading operation serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
4. Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual 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.

5. Should a bag leak detector be installed and operated as specified in B.2 the facility shall maintain records of the details of each event where the audible alarm sounds. These records shall including the date, time, duration, cause, and the facility's response to the alarm. These records will normally record instances where an emissions violation was avoided. Should a bag leak detector be installed and operated

as specified in B.2 the facility shall not be required to maintain records specified in C.1 and C.2 above.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all period of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. Should the facility opt to install a bag leak detector, this reporting requirement shall be vacated.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the 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) by January 31 and July 31 of each year and shall cover the previous 6-month periods. Should the facility opt to install a bag leak detector, this reporting requirement shall be vacated.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed during the sawdust loading operation serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Director (the Ohio EPA, Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month periods.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation  
0% visible emissions from the baghouse stack, as a six-minute average and  
10% visible fugitive emissions from sawdust loading, as a three-minute average  
  
Applicable Compliance Method  
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1), if requested.
  - b. Emission Limitation  
0.50 ton fugitive PE and PM-10 per year

Applicable Compliance Method

Compliance shall be determined as follows:

$$E = SU \times EF$$

Where:

E = Annual emissions, in tons

SU = Amount of sawdust unloaded per year, in tons

EF = Emission factor of 2 lbs PE/ton sawdust unloaded, taken from RACM Table 2.17-1, Fugitive Dust Emission Factors for Woodworking Operations

c. Emission Limitation

2.27 lbs PE per hour and 9.95 tons PE per year from the baghouse stack

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

d. Emission Limitation

1.14 lbs PM-10 per hour and 4.97 tons PM-10 per year from the baghouse stack

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

e. Emission Limitation

0.005 grain PE/dscf and 0.0025 grain PM-10/dscf from the baghouse stack

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

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

- a. Emissions testing was conducted on P010 (P1-13326) on July 8, 2005, at Plant 1. Emissions testing was conducted on P021 (P2-10915 ) on July 6, 2005, and on P020 (P2-10918 ) on July 7, 2005, at Plant 2. Emissions testing was conducted on P006 (P3-12741) on July 19, 2005, at Plant 3. The results of this testing indicated the tested emissions units are operating in compliance with the emissions limitations specified in this permit. Emissions testing shall be completed on 2 - 6 of the following emissions units each year, such that all the

**Emissions Unit ID: P008**

listed emissions units have been tested within 5 years of issuance of this permit.

P1-P008 (P1-13325)	P1-P009 (P1-13327)
P1-P013 (P1-13323)	P2-P014 (P2-10905)
P2-P012 (P2-10903)	P2-P006 (P2-10916)
P2-P010 (P2-10904)	P2-P013 (P2-10914)
P2-P007 (P2-10911)	P2-P011 (P2-10909)
P2-P021 (P2-10917)	P3-P007 (P3-20879)
P3-P005 (P3-12740)	

The following emissions units exhaust inside the plant. The configuration of the baghouse stack and the air conditioning unit does not allow for emissions testing, as Reference Method 1 cannot be met. Should any of these units be modified to allow for emissions testing, the modified unit must be tested within 90 days following the modification.

P1-P012 (P1-13322)	P3-P001 (P3-20865)
P3-P002 (P3-20866)	P3-P003 (P3-12742)

- b. The emission testing shall be conducted to demonstrate compliance with 0.005 grain PE per dscf and 0.0025 grain PM-10 per dscf and with the hourly mass emissions limitations specified in A.1.

**Modification Issued: 4/17/2007**

- c. The following test methods shall be employed to demonstrate compliance with the allowable emission rates:  
  
Methods 1 - 5 and 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 operating at or near its maximum capacity, 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.

**F. Miscellaneous Requirements**

1. This permit to install (PTI 02-20471) is designed to contain all woodworking emissions units, excluding the coating application processes, roadways and parking areas, which are required to obtain a permit to install and a list of all insignificant emissions units at this facility. This permit will typically be modified whenever KraftMaid Cabinetry Plant 1

**Kraft****PTI A****Modification Issued: 4/17/2007**Emissions Unit ID: **P008**

applies for a permit to either modify existing emissions units or to install new emissions units at this facility.

2. The permittee shall submit updated Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12, and P1-P13 to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated Tables shall include an updated demonstration of loading to each baghouse. The updated tables shall include a complete list of emissions units for each table (including an identification of all emissions unit(s) that is/are permanently shut down and dismantled and new or replacement emissions units) 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.

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 permits 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 an application to modify the issued permit be submitted.

The updated Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 will be included in the next modification to PTI 02-20471. If none of the Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 or P1-P13 requires an update, the permittee shall submit a report by February 28 of each year that states no revisions are required.

3. The permittee shall submit an updated Emissions Unit Table P1-A (PTI exempt Emissions Units) to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include the complete list of emissions units including any PTI exempt emissions unit(s) installed during the last calendar year and an identification of all emissions unit(s) that is/are 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.

The updated Emissions Unit Table P1-A will be included in the next modification to PTI 02-20471. If Emissions Unit Table P1-A does not require an update, the permittee shall submit a report by February 28 of each year that states no revision is required.

4. This permit replaces any previous permit issued for any equipment included in this permit-to-install.

Emissions Unit ID: **P008**

5. The following terms and conditions specified above are federally enforceable: A.1, A.2, B.1, B.2, C.1, C.2, C.3, C.4, C.5, D.1, D.2, D.3, E.1, E.2, F.1, F.2, F.3, and F.4.

TABLE P1-P8 for emissions unit P008 at Plant 1  
P1-220  
P1-13325

Date: 9/2005

<b>Equipment</b>	<b>Size of duct in inches</b>
DELTA CUT OFF SAW	2
DELTA CUT OFF SAW	2
DELTA CUT OFF SAW	2
POWER MATIC SHAPER	5
POWER MATIC SHAPER	4
POWER MATIC SHAPER	4
POWER MATIC SHAPER	5
POWER MATIC TABLE SAW	5
CENTAURO BAND SAW	5
DOWN DRAFT TABLE	6
DOWN DRAFT TABLE	2
DELTA CUT OFF SAW	2
DOWN DRAFT TABLE	6
ECO 21	5
ECO 21	3
EDGE BAND TRIMMER	3
WHIRLWIND SANDER	6
WHIRLWIND SANDER	6
UNI SAW	6
ATTENDORF TABLE SAW	4
ATTENDORF TABLE SAW	6
FURNAS SAW	6
POWER MATIC TABLE SAW	5
POWER MATIC TABLE SAW	5
HUFFMAN DOVETAIL SINGLE	4

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**Kraft**

**PTI A**

**Modification Issued: 4/17/2007**

Emissions Unit ID: **P008**

HUFFMAN DOVETAIL SINGLE	4
DELTA CUT OFF SAW	2
DELTA CUT OFF SAW	2
TRUCK TO HEESEMAN LINE	17
TRUCK TO HEESEMAN LINE	17



Applicable Emissions  
Limitations/Control Measures

0.005 grain Particulate  
Emissions (PE) per dscf and  
0.0025 grain PM-10 per dscf  
from the baghouse stack

2.27 lbs PE/hour and 9.95 tons  
per year from the baghouse  
stack

1.14 lbs PM-10 per hour and  
4.97 tons per year from the  
baghouse stack

0% visible emissions from the  
baghouse stack, as a  
six-minute average

0.06 ton fugitive PE per year  
and 0.06 ton fugitive PM-10 per  
year from loading sawdust into  
a dumpster

10% visible fugitive emissions  
from loading sawdust into a  
dumpster, as a three-minute  
average

See A.2.b.  
See A.2.b.  
See A.2.b.  
See A.2.b.

**2. Additional Terms and Conditions**

**2.a** This permit to install (PTI 02-20471) includes the following tables:

Table P1-P8

P008 - Emission Units which are vented to Baghouse

	P1-13325
Table P1-P9	P009 - Emission Units which are vented to Baghouse
	P1-13327
Table P1-P10	P010 - Emission Units which are vented to Baghouse
	P1-13326
Table P1-P11	P011 - Emission Units which are vented to Baghouse
	P1-13324
Table P1-P12	P012 - Emission Units which are vented to Baghouse
	P1-13322
Table P1-P13	P013 - Emission Units which are vented to Baghouse
	P1-13323
Table P1-A	All PTI exempt Emissions Units

- 2.b** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-03(A)(3).

## **B. 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 is developed on the bags.
2. The facility shall retain the option to install a bag leak detector. Should this option be chosen, the bag leak detector shall be properly installed and calibrated, operated and maintained. An audible alarm shall be installed to sound should emissions above the percent saturation, determined during the calibration testing, be exceeded. The requirement to operate this emissions unit within the pressure drop range of 1 to 5 inches of water shall be vacated under this option.

## **C. Monitoring and/or Record keeping 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 weekly 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. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible emissions of fugitive dust from the sawdust loading operation serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
4. Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual 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.
5. Should a bag leak detector be installed and operated as specified in B.2 the facility shall maintain records of the details of each event where the audible alarm sounds. These records shall including the date, time, duration, cause, and the facility's response to the alarm. These records will normally record instances where an emissions violation was avoided. Should a bag leak detector be installed and operated as specified in B.2 the facility shall not be required to maintain records specified in C.1 and C.2 above.

#### **D. Reporting Requirements**

Emissions Unit ID: **P009**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all period of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. Should the facility opt to install a bag leak detector, this reporting requirement shall be vacated.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the 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) by January 31 and July 31 of each year and shall cover the previous 6-month periods. Should the facility opt to install a bag leak detector, this reporting requirement shall be vacated.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed during the sawdust loading operation serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Director (the Ohio EPA, Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month periods.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation  
 0% visible emissions from the baghouse stack, as a six-minute average and 10% visible fugitive emissions from the sawdust loading operation, as a three-minute average  
  
Applicable Compliance Method  
 Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1), if requested.
  - b. Emission Limitation  
 0.06 ton fugitive PE and 0.03 ton fugitive PM-10 per year from the sawdust loading operation  
  
Applicable Compliance Method  
 Compliance shall be determined as follows:

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$$E = SU \times EF \times (1-CE)$$

Where:

E = Annual emissions, in tons

SU = Amount of sawdust unloaded per year, in tons

EF = Emission factor of 2 lbs PE/ton sawdust unloaded, taken from RACM Table 2.17-1, Fugitive Dust Emission Factors for Woodworking Operations

CE = Control efficiency, estimated at 75%, from loading into a covered dumpster

c. Emission Limitation

2.27 lbs PE per hour and 9.95 tons PE per year from the baghouse stack

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

d. Emission Limitation

1.14 lbs PM-10 per hour and 4.97 tons PM-10 per year from the baghouse stack

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

e. Emission Limitation

0.005 grain PE/dscf and 0.0025 grain PM-10/dscf from baghouse exhaust

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

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

- a. Emissions testing was conducted on P010 (P1-13326) on July 8, 2005, at Plant 1. Emissions testing was conducted on P021 (P2-10915 ) on July 6, 2005, and on P020 (P2-10918 ) on July 7, 2005, at Plant 2. Emissions testing was conducted on P006 (P3-12741) on July 19, 2005, at Plant 3. The results of this testing indicated the tested emissions units are operating in compliance with the emissions limitations specified in this permit. Emissions testing shall be completed on 2 - 6 of the following emissions units each year, such that all the listed emissions units have been tested within 5 years of issuance of this permit.

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P1-P008 (P1-13325)  
P1-P013 (P1-13323)  
P2-P012 (P2-10903)  
P2-P010 (P2-10904)  
P2-P007 (P2-10911)  
P2-P021 (P2-10917)  
P3-P005 (P3-12740)

P1-P009 (P1-13327)  
P2-P014 (P2-10905)  
P2-P006 (P2-10916)  
P2-P013 (P2-10914)  
P2-P011 (P2-10909)  
P3-P007 (P3-20879)

The following emissions units exhaust inside the plant. The configuration of the baghouse stack and the air conditioning unit does not allow for emissions testing, as Reference Method 1 cannot be met. Should any of these units be modified to allow for emissions testing, the modified unit must be tested within 90 days following the modification.

P1-P012 (P1-13322)  
P3-P002 (P3-20866)

P3-P001 (P3-20865)  
P3-P003 (P3-12742)

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- b. The emission testing shall be conducted to demonstrate compliance with 0.005 grain PE per dscf and 0.0025 grain PM-10 per dscf and with the hourly mass emissions limitations specified in A.1.
- c. The following test methods shall be employed to demonstrate compliance with the allowable emission rates:  
  
Methods 1 - 5 and 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 operating at or near its maximum capacity, 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.

**F. Miscellaneous Requirements**

**KraftM****PTI A****Modification Issued: 4/17/2007**Emissions Unit ID: **P009**

1. This permit to install (PTI 02-20471) is designed to contain all woodworking emissions units, excluding the coating application processes, roadways and parking areas, which are required to obtain a permit to install and a list of all insignificant emissions units at this facility. This permit will typically be modified whenever KraftMaid Cabinetry Plant 1 applies for a permit to either modify existing emissions units or to install new emissions units at this facility.
2. The permittee shall submit updated Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated Tables shall include an updated demonstration of loading to each baghouse. The updated tables shall include a complete list of emissions units for each table (including an identification of all emissions unit(s) that is/are permanently shut down and dismantled and new or replacement emissions units) 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.

After this report is submitted, the Director (the Ohio EPA, Northeast District Office) shall consider the changes to determine if a modification to the issued permits 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 an application to modify the issued permit be submitted.

The updated Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 will be included in the next modification to PTI 02-20471. If none of the Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 or P1-P13 requires an update, the permittee shall submit a report by February 28 of each year that states no revisions are required.

3. The permittee shall submit an updated Emissions Unit Table P1-A (PTI exempt Emissions Units) to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include the complete list of emissions units including any PTI exempt emissions unit(s) installed during the last calendar year and an identification of all emissions unit(s) that is/are 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.

The updated Emissions Unit Table P1-A will be included in the next modification to PTI 02-20471. If Emissions Unit Table P1-A does not require an update, the permittee shall submit a report by February 28 of each year that states no revision is required.

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**Facility ID: 022800018**

**Emissions Unit ID: P009**

4. This permit replaces any previous permit issued for any equipment included in this permit-to-install.
5. The following terms and conditions specified above are federally enforceable: A.1, A.2, B.1, B.2, C.1, C.2, C.3, C.4, C.5, D.1, D.2, D.3, E.1, E.2, F.1, F.2, F.3, and F.4.

TABLE P1-P9 for emissions unit P009 at Plant 1  
P1-236  
P1-13327

Date: 9/2005

<b>Equipment</b>	<b>Size of duct in inches</b>
EDGE SANDER LEFT SIDE	4
EDGE SANDER LEFT SIDE	4
EDGE SANDER RIGHT SIDE	4
EDGE SANDER RIGHT SIDE	4
CALIBRATION SANDER LSM 8 LL	6
CALIBRATION SANDER LSM 8 LL	6
CALIBRATION SANDER LSM 8 LL	6
CALIBRATION SANDER LSM 8 LL	6
CALIBRATION SANDER LSM 8 LL	6
CALIBRATION SANDER LSM 8 LL	6
CALIBRATION SANDER LSM 8 LL	7
CELFA DOWN DRAFT ROUTER TABLE	8
CELFA DOWN DRAFT ROUTER TABLE	8
FINISH SANDER LSM8 RR	10
FINISH SANDER LSM8 RR	10
FINISH SANDER LSM8 RR	6
FINISH SANDER LSM8 RR	6
FINISH SANDER LSM8 RR	7
CROSSGRAIN SANDER LSM8 OSR 3	6
CROSSGRAIN SANDER LSM8 OSR 3	6
CROSSGRAIN SANDER LSM8 OSR 3	6
CROSSGRAIN SANDER LSM8 OSR 3	6
CROSSGRAIN SANDER LSM8 OSR 3	6
CROSSGRAIN SANDER LSM8 OSR 3	7
FLADDER	8
FLADDER	8
BRUSH MACHINE EA 4	7
BRUSH MACHINE EA 4	5
BRUSH MACHINE EA 4	6
TRUNK FROM DUST COLLECTOR 4	17
TRUNK FROM DUST COLLECTOR 4	17

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WHIRLWIND SANDER	5
TIMESAVER 2 HEAD	8
TIMESAVER 2 HEAD	8
TIMESAVER 2 HEAD	6
TIMESAVER 3 HEAD	8
TIMESAVER 3 HEAD	8
TIMESAVER 3 HEAD	8
TIMESAVER CROSSGRAIN	6
TIMESAVER ROTARY POLISHER	8

TABLE P1-P9 for emissions unit P009 at Plant 1, continued

P1-236

P1-13327

Date: 9/2005

<b>Equipment</b>	<b>Size of duct in inches</b>
TIMESAVER SORBINI	8
TIMESAVER SORBINI	8
TIMESAVER SORBINI	8
EVAN DOUBLE SPINDLE BORER	4
POWER MATIC TABLE SAW	6
WHIRLWIND SANDER	4
KREG SINGLE SPINDLE POCKET BORER	4
POWER MATIC TABLE SAW	6
DOWNDRAFT TABLE	4
DOWNDRAFT TABLE	4
KREG SINGLE SPINDLE POCKET BORER	4



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**Kraft**

**PTI A**

**Modification Issued: 4/17/2007**

Emissions Unit ID: **P010**

See A.2.b.

## 2. Additional Terms and Conditions

2.a This permit to install (PTI 02-20471) includes the following tables:

Table P1-P8 P1-13325	P008 - Emission Units which are vented to Baghouse
Table P1-P9 P1-13327	P009 - Emission Units which are vented to Baghouse
Table P1-P10 P1-13326	P010 - Emission Units which are vented to Baghouse
Table P1-P11 P1-13324	P011 - Emission Units which are vented to Baghouse
Table P1-P12 P1-13322	P012 - Emission Units which are vented to Baghouse
Table P1-P13 P1-13323	P013 - Emission Units which are vented to Baghouse
Table P1-A	All PTI exempt Emissions Units

2.b The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-03(A)(3).

## B. 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 is developed on the bags.
2. The facility shall retain the option to install a bag leak detector. Should this option be chosen, the bag leak detector shall be properly installed and calibrated, operated and maintained. An audible alarm shall be installed to sound should emissions above the percent saturation, determined during the calibration testing, be exceeded. The requirement to operate this emissions unit within the pressure drop range of 1 to 5 inches of water shall be vacated under this option.

## C. Monitoring and/or Record keeping 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 weekly 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. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible emissions of fugitive dust from the sawdust loading operation serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
4. Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual 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.

5. Should a bag leak detector be installed and operated as specified in B.2 the facility shall maintain records of the details of each event where the audible alarm sounds. These records shall including the date, time, duration, cause, and the facility's response to the alarm. These records will normally record instances where an emissions violation was avoided. Should a bag leak detector be installed and operated

as specified in B.2 the facility shall not be required to maintain records specified in C.1 and C.2 above.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all period of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. Should the facility opt to install a bag leak detector, this reporting requirement shall be vacated.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the 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) by January 31 and July 31 of each year and shall cover the previous 6-month periods. Should the facility opt to install a bag leak detector, this reporting requirement shall be vacated.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed during the sawdust loading operation serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Director (the Ohio EPA, Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month periods.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation  
0% visible emissions from the baghouse stack, as a six-minute average and  
10% visible fugitive emissions from sawdust loading, as a three-minute average  
  
Applicable Compliance Method  
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1), if requested.
  - b. Emission Limitation  
0.04 ton fugitive PE and 0.04 ton fugitive PM-10 per year from sawdust loading

Applicable Compliance Method

Compliance shall be determined as follows:

$$E = SU \times EF \times (1-CE)$$

Where:

E = Annual emissions, in tons

SU = Amount of sawdust unloaded per year, in tons

EF = Emission factor of 2 lbs PE/ton sawdust unloaded, taken from RACM Table 2.17-1, Fugitive Dust Emission Factors for Woodworking Operations

CE = Control efficiency, estimated at 75%, from loading into a covered dumpster

c. Emission Limitation

1.34 lbs PE per hour and 5.85 tons PE per year from the baghouse stack

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

d. Emission Limitation

0.67 lb PM-10 per hour and 2.92 tons PM-10 per year from the baghouse stack

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

e. Emission Limitation

0.005 grain PE/dscf and 0.0025 grain PM-10/dscf from baghouse exhaust

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

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

- a. Emissions testing was conducted on P010 (P1-13326) on July 8, 2005, at Plant 1. Emissions testing was conducted on P021 (P2-10915 ) on July 6, 2005, and on P020 (P2-10918 ) on July 7, 2005, at Plant 2. Emissions testing was conducted on P006 (P3-12741) on July 19, 2005, at Plant 3. The results of this testing indicated the tested emissions units are operating in compliance with the emissions limitations specified in this permit. Emissions testing shall be

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**Emissions Unit ID: P010**

completed on 2 - 6 of the following emissions units each year, such that all the listed emissions units have been tested within 5 years of issuance of this permit.

P1-P008 (P1-13325)	P1-P009 (P1-13327)
P1-P013 (P1-13323)	P2-P014 (P2-10905)
P2-P012 (P2-10903)	P2-P006 (P2-10916)
P2-P010 (P2-10904)	P2-P013 (P2-10914)
P2-P007 (P2-10911)	P2-P011 (P2-10909)
P2-P021 (P2-10917)	P3-P007 (P3-20879)
P3-P005 (P3-12740)	

The following emissions units exhaust inside the plant. The configuration of the baghouse stack and the air conditioning unit does not allow for emissions testing, as Reference Method 1 cannot be met. Should any of these units be modified to allow for emissions testing, the modified unit must be tested within 90 days following the modification.

P1-P012 (P1-13322)	P3-P001 (P3-20865)
P3-P002 (P3-20866)	P3-P003 (P3-12742)

- b. The emission testing shall be conducted to demonstrate compliance with 0.005 grain PE per dscf and 0.0025 grain PM-10 per dscf and with the hourly mass emission limitations specified in A.1.

- c. The following test methods shall be employed to demonstrate compliance with the allowable emission rates:  
  
Methods 1 - 5 and 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 operating at or near its maximum capacity, 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.

## **F. Miscellaneous Requirements**

- 1. This permit to install (PTI 02-20471) is designed to contain all woodworking emissions units, excluding the coating application processes, roadways and parking areas, which are required to obtain a permit to install and a list of all insignificant emissions units at this facility. This permit will typically be modified whenever KraftMaid Cabinetry Plant 1

applies for a permit to either modify existing emissions units or to install new emissions units at this facility.

2. The permittee shall submit updated Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated Tables shall include an updated demonstration of loading to each baghouse. The updated tables shall include a complete list of emissions units for each table (including an identification of all emissions unit(s) that is/are permanently shut down and dismantled and new or replacement emissions units) 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.

After this report is submitted, the Director (the Ohio EPA, Northeast District Office) shall consider the changes to determine if a modification to the issued permits 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 an application to modify the issued permit be submitted.

The updated Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 will be included in the next modification to PTI 02-20471. If none of the Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 requires an update, the permittee shall submit a report by February 28 of each year that states no revisions are required.

3. The permittee shall submit an updated Emissions Unit Table P1-A (PTI exempt Emissions Units) to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include the complete list of emissions units including any PTI exempt emissions unit(s) installed during the last calendar year and an identification of all emissions unit(s) that is/are 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.

The updated Emissions Unit Table P1-A will be included in the next modification to PTI 02-20471. If Emissions Unit Table P1-A does not require an update, the permittee shall submit a report by February 28 of each year that states no revision is required.

4. This permit replaces any previous permit issued for any equipment included in this permit-to-install.
5. The following terms and conditions specified above are federally enforceable: A.1, A.2,

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B.1, B.2, C.1, C.2, C.3, C.4, C.5, D.1, D.2, D.3, E.1, E.2, F.1, F.2, F.3, and F.4.

TABLE P1-P10 for emissions unit P010 at Plant 1

P1-242

P1-13326

Date: 9/2005

<b>Equipment</b>	<b>Size of duct in inches</b>
ROTO SANDER UNIT	8
ROTO SANDER UNIT	8
ROTO SANDER UNIT	8
ECO-SPRAYER SYSTEM	6
ECO-SPRAYER SYSTEM	6
ECO-SPRAYER SYSTEM	6
CEFLA # 2 BRUSH SYSTEM (PRIMER)	5
CEFLA # 2 BRUSH SYSTEM (PRIMER)	5
CEFLA # 2 BRUSH SYSTEM (PRIMER)	5
CEFLA # 2 BRUSH SYSTEM (PRIMER)	6
CEFLA # 2 BRUSH SYSTEM (PRIMER)	6
CEFLA # 2 BRUSH SYSTEM (TOP COAT)	5
CEFLA # 2 BRUSH SYSTEM (TOP COAT)	5
CEFLA # 2 BRUSH SYSTEM (TOP COAT)	5
CEFLA # 2 BRUSH SYSTEM (TOP COAT)	5
CEFLA # 2 BRUSH SYSTEM (TOP COAT)	6
CEFLA # 2 BRUSH SYSTEM (TOP COAT)	6
ECO-SPRAYER SYSTEM	6
ECO-SPRAYER SYSTEM	6
ECO-SPRAYER SYSTEM	6
ROTO SANDER UNIT	8
ROTO SANDER UNIT	8

**Kraft**

**PTI A**

**Modification Issued: 4/17/2007**

Emissions Unit ID: **P011**

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-17- 08 (B) OAC rule 3745-17-07 (B)
<p>P011 consists of a wood chipper vented to P1-13324 (former facility id was P1-244), a 4,968 cfm baghouse.</p> <p>See attached Table P1-P11. (P1 is Plant 1.)</p>	<p>OAC rule 3745-31-05 (A)(3)</p>	
	<p>OAC rule 3745-17-11 (B) OAC rule 3745-17-07 (A)(1)</p>	

Applicable Emissions  
 Limitations/Control Measures

0.005 grain Particulate  
 Emissions (PE) per dscf and  
 0.0025 grain PM-10 per dscf  
 from the baghouse stack

0.21 lb PE/hour and 0.93 ton  
 per year from the baghouse  
 stack

0.11 lb PM-10 per hour and  
 0.47 ton per year from the  
 baghouse stack

0% visible emissions from the  
 baghouse stack, as a  
 six-minute average

0.004 ton fugitive PE per year  
 and 0.004 ton fugitive PM-10  
 per year from the sawdust  
 loading operation

10% visible fugitive emissions  
 from the sawdust loading  
 operation, as a three-minute  
 average

See A.2.b.  
 See A.2.b.  
 See A.2.b.  
 See A.2.b.

**2. Additional Terms and Conditions**

**2.a** This permit to install (PTI 02-20471) includes the following tables:

Table P1-P8

P008 - Emission Units which are vented to Baghouse

	P1-13325
Table P1-P9	P009 - Emission Units which are vented to Baghouse
	P1-13327
Table P1-P10	P010 - Emission Units which are vented to Baghouse
	P1-13326
Table P1-P11	P011 - Emission Units which are vented to Baghouse
	P1-13324
Table P1-P12	P012 - Emission Units which are vented to Baghouse
	P1-13322
Table P1-P13	P013 - Emission Units which are vented to Baghouse
	P1-13323
Table P1-A	All PTI exempt Emissions Units

- 2.b** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-03(A)(3).

## **B. 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 is developed on the bags.
2. The facility shall retain the option to install a bag leak detector. Should this option be chosen, the bag leak detector shall be properly installed and calibrated, operated and maintained. An audible alarm shall be installed to sound should emissions above the percent saturation, determined during the calibration testing, be exceeded. The requirement to operate this emissions unit within the pressure drop range of 1 to 5 inches of water shall be vacated under this option.

## **C. Monitoring and/or Record keeping 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 weekly 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

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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. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible emissions of fugitive dust from the sawdust loading operation serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
4. Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual 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.
5. Should a bag leak detector be installed and operated as specified in B.2 the facility shall maintain records of the details of each event where the audible alarm sounds. These records shall including the date, time, duration, cause, and the facility's response to the alarm. These records will normally record instances where an emissions violation was avoided. Should a bag leak detector be installed and operated as specified in B.2 the facility shall not be required to maintain records specified in C.1 and C.2 above.

**D. Reporting Requirements**

Emissions Unit ID: **P011**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all period of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. Should the facility opt to install a bag leak detector, this reporting requirement shall be vacated.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the 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) by January 31 and July 31 of each year and shall cover the previous 6-month periods. Should the facility opt to install a bag leak detector, this reporting requirement shall be vacated.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed during the sawdust loading operation serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Director (the Ohio EPA, Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month periods.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation  
 0% visible emissions from the baghouse stack, as a six-minute average and 10% visible fugitive emissions from the sawdust loading operation, as a three-minute average  
  
Applicable Compliance Method  
 Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1), if requested.
  - b. Emission Limitation  
 0.004 ton fugitive PE and 0.004 ton PM-10 per year from the sawdust loading operation  
  
Applicable Compliance Method  
 Compliance shall be determined as follows:

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$$E = SU \times EF$$

Where:

E = Annual emissions, in tons

SU = Amount of sawdust unloaded per year, in tons

EF = Emission factor of 2 lbs PE/ton sawdust unloaded, taken from RACM Table 2.17-1, Fugitive Dust Emission Factors for Woodworking Operations

- c. Emission Limitation  
0.21 lb PE per hour and 0.93 ton PE per year from the baghouse stack

**KraftM****PTI A****Modification Issued: 4/17/2007**Emissions Unit ID: **P011**Applicable Compliance Method

This 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. OAC rule 3745-17-03(B)(10), if requested.

d. Emission Limitation

0.11 lb PM-10 per hour and 0.47 ton PM-10 per year from the baghouse stack

Applicable Compliance Method

This 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. OAC rule 3745-17-03(B)(10), if requested.

e. Emission Limitation

0.005 grain PE/dscf and 0.0025 grain PM-10/dscf from baghouse exhaust

Applicable Compliance Method

This 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. OAC rule 3745-17-03(B)(10), if requested.

**F. Miscellaneous Requirements**

1. This permit to install (PTI 02-20471) is designed to contain all woodworking emissions units, excluding the coating application processes, roadways and parking areas, which are required to obtain a permit to install and a list of all insignificant emissions units at this facility. This permit will typically be modified whenever KraftMaid Cabinetry Plant 1 applies for a permit to either modify existing emissions units or to install new emissions units at this facility.
2. The permittee shall submit updated Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated Tables shall include an updated demonstration of loading to each baghouse. The updated tables shall include a complete list of emissions units for each table (including an identification of all emissions unit(s) that is/are permanently shut down and dismantled and new or replacement emissions units) as of the end of the calendar year and shall highlight or otherwise flag the changes

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**PTI Application: 02-20471**  
**Modif**

**Facility ID: 022800018**

**Emissions Unit ID: P011**

from the previous year. This report shall be submitted to the Director (the Ohio EPA, Northeast District Office) by February 28 of each year.

After this report is submitted, the Director (the Ohio EPA, Northeast District Office) shall consider the changes to determine if a modification to the issued permits 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 an application to modify the issued permit be submitted.

The updated Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 will be included in the next modification to PTI 02-20471. If none of the Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 requires an update, the permittee shall submit a report by February 28 of each year that states no revisions are required.

3. The permittee shall submit an updated Emissions Unit Table P1-A (PTI exempt Emissions Units) to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include the complete list of emissions units including any PTI exempt emissions unit(s) installed during the last calendar year and an identification of all emissions unit(s) that is/are 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.

The updated Emissions Unit Table P1-A will be included in the next modification to PTI 02-20471. If Emissions Unit Table P1-A does not require an update, the permittee shall submit a report by February 28 of each year that states no revision is required.

4. This permit replaces any previous permit issued for any equipment included in this permit-to-install.
5. The following terms and conditions specified above are federally enforceable: A.1, A.2, B.1, B.2, C.1, C.2, C.3, C.4, C.5, D.1, D.2, D.3, E.1, F.1, F.2, F.3, and F.4.

TABLE P1-P11 for emissions unit P011 at Plant 1  
P1-244  
P1-13324

Date: 9/2005

**Equipment**  
Grinder

**Size of duct in inches**  
12

48

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Emissions Unit ID: **P012**

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-17-07 (A)(1) OAC rule 3745-17- 08 (B) OAC rule 3745-17-07 (B)
P012 consists of all woodworking equipment vented to P1-13322 (former facility id was P1-249), a 21,200 cfm baghouse.	OAC rule 3745-31-05 (A)(3)	
See attached Table P1-P12. (P1 is Plant 1.)		
Modification		
	OAC rule 3745-17-11 (B)	

Applicable Emissions  
 Limitations/Control Measures

0.005 grain Particulate  
 Emissions (PE) per dscf and  
 0.0025 grain PM-10 per dscf  
 from the baghouse stack

0.91 lb PE/hour and 3.98 tons  
 per year from the baghouse  
 stack

0.45 lb PM-10 per hour and  
 1.99 tons per year from the  
 baghouse stack

0% visible emissions from the  
 baghouse stack, as a  
 six-minute average

0.004 ton fugitive PE per year  
 and 0.004 ton fugitive PM-10  
 per year from the sawdust  
 loading operation

10% visible fugitive emissions  
 from the sawdust loading  
 operation, as a three-minute  
 average

See A.2.b.  
 See A.2.b.  
 See A.2.b.  
 See A.2.b.

**2. Additional Terms and Conditions**

**2.a** This permit to install (PTI 02-20471) includes the following tables:

Table P1-P8

P008 - Emission Units which are vented to Baghouse

	P1-13325
Table P1-P9	P009 - Emission Units which are vented to Baghouse
	P1-13327
Table P1-P10	P010 - Emission Units which are vented to Baghouse
	P1-13326
Table P1-P11	P011 - Emission Units which are vented to Baghouse
	P1-13324
Table P1-P12	P012 - Emission Units which are vented to Baghouse
	P1-13322
Table P1-P13	P013 - Emission Units which are vented to Baghouse
	P1-13323
Table P1-A	All PTI exempt Emissions Units

- 2.b** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-03(A)(3).

## **B. 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 is developed on the bags.
2. The facility shall retain the option to install a bag leak detector. Should this option be chosen, the bag leak detector shall be properly installed and calibrated, operated and maintained. An audible alarm shall be installed to sound should emissions above the percent saturation, determined during the calibration testing, be exceeded. The requirement to operate this emissions unit within the pressure drop range of 1 to 5 inches of water shall be vacated under this option.

## **C. Monitoring and/or Record keeping 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 weekly 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

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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. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible emissions of fugitive dust from the sawdust loading operation serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
4. Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual 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.

5. Should a bag leak detector be installed and operated as specified in B.2 the facility shall maintain records of the details of each event where the audible alarm sounds. These records shall including the date, time, duration, cause, and the facility's response to the alarm. These records will normally record instances where an emissions violation was avoided. Should a bag leak detector be installed and operated as specified in B.2 the facility shall not be required to maintain records specified in C.1 and C.2 above.

**D. Reporting Requirements**

Emissions Unit ID: **P012**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all period of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. Should the facility opt to install a bag leak detector, this reporting requirement shall be vacated.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the 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) by January 31 and July 31 of each year and shall cover the previous 6-month periods. Should the facility opt to install a bag leak detector, this reporting requirement shall be vacated.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed the sawdust loading operation serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Director (the Ohio EPA, Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month periods.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation  
 0% visible emissions from the baghouse stack, as a six-minute average and 10% visible fugitive emissions from the sawdust loading operation, as a three-minute average  
  
Applicable Compliance Method  
 Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1), if requested.
  - b. Emission Limitation  
 0.004 ton fugitive PE and 0.004 ton PM-10 per year from the sawdust loading operation  
  
Applicable Compliance Method  
 Compliance shall be determined as follows:

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$$E = SU \times EF$$

Where:

E = Annual emissions, in tons

SU = Amount of sawdust unloaded per year, in tons

EF = Emission factor of 2 lbs PE/ton sawdust unloaded, taken from RACM Table 2.17-1, Fugitive Dust Emission Factors for Woodworking Operations

- c. Emission Limitation  
0.91 lb PE per hour and 3.98 tons PE per year from the baghouse stack

**Kraftl****PTI A****Modification Issued: 4/17/2007**Emissions Unit ID: **P012**Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

d. Emission Limitation

0.45 lb PM-10 per hour and 1.99 tons PM-10 per year from the baghouse stack

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

e. Emission Limitation

0.005 grain PE/dscf and 0.0025 grain PM-10/dscf from baghouse exhaust

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

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

- a. Emissions testing was conducted on P010 (P1-13326) on July 8, 2005, at Plant 1. Emissions testing was conducted on P021 (P2-10915 ) on July 6, 2005, and on P020 (P2-10918 ) on July 7, 2005, at Plant 2. Emissions testing was conducted on P006 (P3-12741) on July 19, 2005, at Plant 3. The results of this testing indicated the tested emissions units are operating in compliance with the emissions limitations specified in this permit. Emissions testing shall be completed on 2 - 6 of the following emissions units each year, such that all the listed emissions units have been tested within 5 years of issuance of this permit.

P1-P008 (P1-13325)

P1-P009 (P1-13327)

P1-P013 (P1-13323)

P2-P014 (P2-10905)

P2-P012 (P2-10903)

P2-P006 (P2-10916)

P2-P010 (P2-10904)

P2-P013 (P2-10914)

P2-P007 (P2-10911)

P2-P011 (P2-10909)

P2-P021 (P2-10917)

P3-P007 (P3-20879)

P3-P005 (P3-12740)

The following emissions units exhaust inside the plant. The configuration of the baghouse stack and the air conditioning unit does not allow for emissions testing, as Reference Method 1 cannot be met. Should any of these units be modified to allow for emissions testing, the modified unit must be tested within 90 days following the modification.

P1-P012 (P1-13322)  
P3-P002 (P3-20866)

P3-P001 (P3-20865)  
P3-P003 (P3-12742)

- b. The emission testing shall be conducted to demonstrate compliance with 0.005 grain PE per dscf and 0.0025 grain PM-10 per dscf and with the hourly mass emission limitations specified in A.1.
- c. The following test methods shall be employed to demonstrate compliance with the allowable emission rates:
- Methods 1 - 5 and 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 operating at or near its maximum capacity, 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.

## F. Miscellaneous Requirements

1. This permit to install (PTI 02-20471) is designed to contain all woodworking emissions units, excluding the coating application processes, roadways and parking areas, which are required to obtain a permit to install and a list of all insignificant emissions units at this facility. This permit will typically be modified whenever KraftMaid Cabinetry Plant 1 applies for a permit to either modify existing emissions units or to install new emissions units at this facility.
2. The permittee shall submit updated Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated Tables shall include an updated demonstration of loading to each baghouse. The updated tables shall include a complete list of emissions units for each table (including an identification of all emissions unit(s) that is/are permanently shut down and dismantled and new or replacement emissions units) 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.

After this report is submitted, the Director (the Ohio EPA, Northeast District Office) shall consider the changes to determine if a modification to the issued permits 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 an application to modify the issued permit be submitted.

The updated Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 will be included in the next modification to PTI 02-20471. If none of the Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 requires an update, the permittee shall submit a report by February 28 of each year that states no revisions are required.

3. The permittee shall submit an updated Emissions Unit Table P1-A (PTI exempt Emissions Units) to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include the complete list of emissions units including any PTI exempt emissions unit(s) installed during the last calendar year and an identification of all emissions unit(s) that is/are 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.

Emissions Unit ID: **P012**

The updated Emissions Unit Table P1-A will be included in the next modification to PTI 02-20471. If Emissions Unit Table P1-A does not require an update, the permittee shall submit a report by February 28 of each year that states no revision is required.

4. This permit replaces any previous permit issued for any equipment included in this permit-to-install.
5. The following terms and conditions specified above are federally enforceable: A.1, A.2, B.1, B.2, C.1, C.2, C.3, C.4, C.5, D.1, D.2, D.3, E.1, E.2, F.1, F.2, F.3, and F.4.

TABLE P1-P12 for emissions unit P012 at Plant 1  
P1-249  
P1-13322

Date: 9/2005

<b>Equipment</b>	<b>Size of duct in inches</b>
DMC ROTO SAND UNIT P1-10 (PRIMER)	6
DMC ROTO SAND UNIT P1-10 (PRIMER)	8
ECO-SPRAYER SYSTEM P1-056	6
ECO-SPRAYER SYSTEM P1-056	6
ECO-SPRAYER SYSTEM P1-056	6
BRUSH ASSEMBLY DENNIBER P1-03 (PRIMER)	5
BRUSH ASSEMBLY DENNIBER P1-03 (PRIMER)	5
BRUSH ASSEMBLY DENNIBER P1-03 (PRIMER)	6
BRUSH ASSEMBLY DENNIBER P1-03 (PRIMER)	6
BRUSH ASSEMBLY DENNIBER P1-03 (PRIMER)	6
BRUSH ASSEMBLY DENNIBER P1-03 (PRIMER)	6
BRUSH ASSEMBLY DENNIBER P1-14 (TOP COAT)	5
BRUSH ASSEMBLY DENNIBER P1-14 (TOP COAT)	5
BRUSH ASSEMBLY DENNIBER P1-14 (TOP COAT)	6
BRUSH ASSEMBLY DENNIBER P1-14 (TOP COAT)	6
BRUSH ASSEMBLY DENNIBER P1-14 (TOP COAT)	6
BRUSH ASSEMBLY DENNIBER P1-14 (TOP COAT)	6
ECO-SPRAYER SYSTEM P1-18	6
ECO-SPRAYER SYSTEM P1-18	6
ECO-SPRAYER SYSTEM P1-18	6
DMC ROTO SAND UNIT (TOP COAT)	6
DMC ROTO SAND UNIT (TOP COAT)	6
DMC ROTO SAND UNIT (TOP COAT)	6
DMC ROTO SAND UNIT (TOP COAT)	8



**Kraft**

**PTI A**

**Modification Issued: 4/17/2007**

Emissions Unit ID: **P013**

Applicable Emissions  
Limitations/Control Measures

0.005 grain Particulate  
Emissions (PE) per dscf and  
0.0025 grain PM-10 per dscf  
from the baghouse stack

0.91 lb PE/hour and 3.98 tons  
per year from the baghouse  
stack

0.45 lb PM-10 per hour and  
1.99 tons per year from the  
baghouse stack

0% visible emissions from the  
baghouse stack, as a  
six-minute average

0.02 ton fugitive PE per year  
and 0.02 ton fugitive PM-10 per  
year from the sawdust loading  
operation

10% visible fugitive emissions  
from the sawdust loading  
operation, as a three-minute  
average

See A.2.b.  
See A.2.b.  
See A.2.b.  
See A.2.b.

**2. Additional Terms and Conditions**

**2.a** This permit to install (PTI 02-20471) includes the following tables:

Table P1-P8 P1-13325	P008 - Emission Units which are vented to Baghouse
Table P1-P9 P1-13327	P009 - Emission Units which are vented to Baghouse
Table P1-P10 P1-13326	P010 - Emission Units which are vented to Baghouse
Table P1-P11 P1-13324	P011 - Emission Units which are vented to Baghouse
Table P1-P12 P1-13322	P012 - Emission Units which are vented to Baghouse
Table P1-P13 P1-13323	P013 - Emission Units which are vented to Baghouse
Table P1-A	All PTI exempt Emissions Units

- 2.b** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-03(A)(3).

## **B. 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 is developed on the bags.
2. The facility shall retain the option to install a bag leak detector. Should this option be chosen, the bag leak detector shall be properly installed and calibrated, operated and maintained. An audible alarm shall be installed to sound should emissions above the percent saturation, determined during the calibration testing, be exceeded. The requirement to operate this emissions unit within the pressure drop range of 1 to 5 inches of water shall be vacated under this option.

## **C. Monitoring and/or Record keeping 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 weekly 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. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible emissions of fugitive dust from the sawdust loading operation serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
4. Notwithstanding the frequency of reporting requirements specified above, the permittee may reduce the frequency of visual 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.
5. Should a bag leak detector be installed and operated as specified in B.2 the facility shall maintain records of the details of each event where the audible alarm sounds. These records shall including the date, time, duration, cause, and the facility's response to the alarm. These records will normally record instances where an emissions violation was avoided. Should a bag leak detector be installed and operated as specified in B.2 the facility shall not be required to maintain records specified in C.1 and C.2 above.

#### **D. Reporting Requirements**

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1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all period of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. Should the facility opt to install a bag leak detector, this reporting requirement shall be vacated.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the 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) by January 31 and July 31 of each year and shall cover the previous 6-month periods. Should the facility opt to install a bag leak detector, this reporting requirement shall be vacated.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed during the sawdust loading operation serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Director (the Ohio EPA, Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month periods.

**E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation  
0% visible emissions from the baghouse stack, as a six-minute average and 10% visible fugitive emissions from the sawdust loading operation, as a three-minute average  
  
Applicable Compliance Method  
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1), if requested.
  - b. Emission Limitation  
0.02 ton fugitive PE and 0.02 ton PM-10 per year from the sawdust loading operation

Applicable Compliance Method

Compliance shall be determined as follows:

$$E = SU \times EF \times (1-CE)$$

Where:

E = Annual emissions, in tons

SU = Amount of sawdust unloaded per year, in tons

EF = Emission factor of 2 lbs PE/ton sawdust unloaded, taken from RACM Table 2.17-1, Fugitive Dust Emission Factors for Woodworking Operations

CE = Control efficiency, estimated at 75%, from loading into a covered dumpster

- c. Emission Limitation  
 0.91 lb PE per hour and 3.98 tons PE per year from the baghouse stack

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

- d. Emission Limitation  
 0.45 lb PM-10 per hour and 1.99 tons PM-10 per year from the baghouse stack

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

- e. Emission Limitation  
 0.005 grain PE/dscf and 0.0025 grain PM-10/dscf from baghouse exhaust

Applicable Compliance Method

OAC rule 3745-17-03(B)(10). See section E.2.

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

- a. Emissions testing was conducted on P010 (P1-13326) on July 8, 2005, at Plant 1. Emissions testing was conducted on P021 (P2-10915 ) on July 6, 2005, and on P020 (P2-10918 ) on July 7, 2005, at Plant 2. Emissions testing was conducted on P007 (P3-12741) on July 19, 2005, at Plant 3. The results of this testing indicated the tested emissions units are operating in compliance with the emissions limitations specified in this permit. Emissions testing shall be completed on 2 - 6 of the following emissions units each year, such that all the listed emissions units have been tested within 5 years of issuance of this permit.

**Kraft****PTI A****Modification Issued: 4/17/2007**Emissions Unit ID: **P013**

P1-P008 (P1-13325)  
P1-P013 (P1-13323)  
P2-P012 (P2-10903)  
P2-P010 (P2-10904)  
P2-P007 (P2-10911)  
P2-P021 (P2-10917)  
P3-P005 (P3-12740)

P1-P009 (P1-13327)  
P2-P014 (P2-10905)  
P2-P006 (P2-10916)  
P2-P013 (P2-10914)  
P2-P011 (P2-10909)  
P3-P007 (P3-20879)

The following emissions units exhaust inside the plant. The configuration of the baghouse stack and the air conditioning unit does not allow for emissions testing, as Reference Method 1 cannot be met. Should any of these units be modified to allow for emissions testing, the modified unit must be tested within 90 days following the modification.

P1-P012 (P1-13322)  
P3-P002 (P3-20866)

P3-P001 (P3-20865)  
P3-P003 (P3-12742)

**Emissions Unit ID: P013**

- b. The emission testing shall be conducted to demonstrate compliance with 0.005 grain PE per dscf and 0.0025 grain PM-10 per dscf and with the hourly mass emission limitations specified in A.1.
- c. The following test methods shall be employed to demonstrate compliance with the allowable emission rates:  
  
Methods 1 - 5 and 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 operating at or near its maximum capacity, 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.

## **F. Miscellaneous Requirements**

- 1. This permit to install (PTI 02-20471) is designed to contain all woodworking emissions

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units, excluding the coating application processes, roadways and parking areas, which are required to obtain a permit to install and a list of all insignificant emissions units at this facility. This permit will typically be modified whenever KraftMaid Cabinetry Plant 1 applies for a permit to either modify existing emissions units or to install new emissions units at this facility.

2. The permittee shall submit updated Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated Tables shall include an updated demonstration of loading to each baghouse. The updated tables shall include a complete list of emissions units for each table (including an identification of all emissions unit(s) that is/are permanently shut down and dismantled and new or replacement emissions units) 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.

After this report is submitted, the Director (the Ohio EPA, Northeast District Office) shall consider the changes to determine if a modification to the issued permits 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 an application to modify the issued permit be submitted.

The updated Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 will be included in the next modification to PTI 02-20471. If none of the Emissions Unit Tables P1-P8, P1-P9, P1-P10, P1-P11, P1-P12 and P1-P13 requires an update, the permittee shall submit a report by February 28 of each year that states no revisions are required.

3. The permittee shall submit an updated Emissions Unit Table P1-A (PTI exempt Emissions Units) to the Director (the Ohio EPA, Northeast District Office) on an annual basis. The updated table shall include the complete list of emissions units including any PTI exempt emissions unit(s) installed during the last calendar year and an identification of all emissions unit(s) that is/are 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.

The updated Emissions Unit Table P1-A will be included in the next modification to PTI 02-20471. If Emissions Unit Table P1-A does not require an update, the permittee shall submit a report by February 28 of each year that states no revision is required.

**KraftMaid Cabinetry Inc**  
**PTI Application: 02 20171**  
**Modif**

**Facility ID: 022800018**

**Emissions Unit ID: P013**

4. This permit replaces any previous permit issued for any equipment included in this permit-to-install.
5. The following terms and conditions specified above are federally enforceable: A.1, A.2, B.1, B.2, C.1, C.2, C.3, C.4, C.5, D.1, D.2, D.3, E.1, E.2, F.1, F.2, F.3, and F.4.

TABLE P1-P13 for emissions unit P013 at Plant 1  
 P1-250  
 P1-13323

Date: 9/2005

<b>Equipment</b>	<b>Size of duct in inches</b>
ROUTER	4
ROUTER	4
ROUTER	4
ROUTER	6
ROUTER # 184	4
ROUTER # 184	6
UNISAW P1-75	5
FLUTE CUTTING MACHINE	6
ALTENDORF TABLE SAW	4
HOMAG LINE (SANDING)	4
KOCH BORER	5
DATO SAW P1-092	5
KOCH BORER	5

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**PTI A**

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Emissions Unit ID: **P013**

KOCH BORER	5
KOCH BORER	5
KOCH BORER	5

TABLE P1-A for all PTI exempt emission units at Plant 1

In addition, this facility has hand sanders, routers, miter saws, table saws and other wood working equipment which are exempt from PTI requirements.