



State of Ohio Environmental Protection Agency

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Columbus, OH 43216-1049

2/19/2010

MICHAEL SCHMIDT
BAKERY FEEDS
4221 ALEXANDRIA PIKE
COLD SPRING, KY 41076-1897

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0387000386
Permit Number: P0105879
Permit Type: Initial Installation
County: Wood

Certified Mail

Yes	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Sentinel-Tribune. A copy of the public notice and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control Web page <http://www.epa.ohio.gov/dapc> in Microsoft Word and Adobe Acrobat format. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install and operate will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install and Operate is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461.

Sincerely,

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA-NWDO; Michigan; Indiana; Canada

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

PUBLIC NOTICE PUBLIC HEARING
OHIO ENVIRONMENTAL PROTECTION AGENCY
ISSUANCE OF A DRAFT PERMIT-TO-INSTALL AND OPERATE (PTIO) TO
Bakery Feeds
12850 Quarry Road
North Baltimore, Ohio

Public notice is hereby given that the Ohio EPA - Division of Air Pollution Control (DAPC) has issued, on **February 19, 2010**, a draft Permit-to-Install and Operate (PTIO) to Bakery Feeds (Permit Number: P0105879). The draft PTIO involves the proposed installation of air contaminant sources associated with a scrap bakery material recycling facility.

The scrap bakery material recycling facility is proposed to be located at 12850 Quarry Road, North Baltimore, Ohio.

Copies of the draft PTI are available for review at Ohio EPA's Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio, (419) 352-8461. The draft permit may also be accessed through Ohio EPA's website at the following link:

<http://www.epa.state.oh.us/dapc/newpermits/airpermits.aspx>

An Ohio EPA information session and public hearing concerning the draft PTI will be held on March 25, 2010 at the North Baltimore Public Library, 230 North Main Street, North Baltimore, Ohio 45872. The information session will begin at 5:30 pm. The public hearing will follow immediately and continue until all persons have had the opportunity to provide testimony related to the proposed permit.

All interested persons are entitled to attend or be represented and give written or oral comments on the draft permit at the hearing. Written comments must be received by Ohio EPA at the close of the business day on March 29, 2010. Comments received after this date will not be considered to be a part of the official record. Written comments may be submitted at the hearing or sent to: Jennifer Jolliff, Division of Air Pollution, Ohio EPA's Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio 43402.



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Bakery Feeds is proposing the installation of a new scrap bakery material recycling facility to be located in North Baltimore, Ohio (Wood County). The scrap bakery material recycling facility will receive bakery waste material which will be dried by heat generated from a biomass burner (i.e. sawdust, peanut shells, etc. used as fuel source). The dried material is processed through sizing and blending operations to create a finished meal product that is used as an ingredient in the manufacturing of animal feed.

3. Facility Emissions and Attainment Status:

The proposed project involves the installation of an entirely “new” facility and as such the allowable emissions established in this Permit to Install and Operate (PTIO) will reflect the Potential to Emit (PTE) for Prevention of Significant Deterioration (PSD) and Title V applicability. Bakery Feeds is requesting federally enforceable restrictions and limitations to restrict the potential emissions of volatile organic compounds (VOC) and particulate matter ten microns or less in size (PM10) emitted from the proposed operation. The scrap bakery material recycling facility will also emit the following criteria pollutants at levels below major source thresholds for PSD and Title V purposes: carbon monoxide (CO), nitrogen oxide (NOx), and sulfur dioxide (SO2). Wood County is classified as attainment for all criteria pollutants.

4. Source Emissions:

Bakery Feeds is requesting federally enforceable restrictions and limitations associated with applying regenerative thermal oxidation control of VOC and PM10 generated by the scrap bakery waste rotary dryer (including biomass burner) portion of the operation. This PTIO establishes mass emission limitations of 22.82 pounds VOC per hour and 16.70 pounds PM10 per hour. The federally enforceable pound per hour limitations are based on operational restrictions involving VOC destruction efficiency, maximum PM10 outlet concentration, and control system capture efficiency.

The federally enforceable requirements established in this PTIO will limit the PTE from the scrap bakery waste rotary dryer (including biomass burner) to 99.95 tons of VOC and 73.15 tons of PM10.

5. Conclusion:

As a result of the federally enforceable limitations on the PTE from the scrap bakery waste rotary dryer (including biomass burner), the potential emissions from the proposed project will not trigger PSD or Title V applicability.

6. Please provide additional notes or comments as necessary:

None



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Permit Strategy Write-Up
Permit Number: P0105879
Facility ID: 0387000386

7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	99.95
PM10	73.15
PE	16.64
Fugitive PM10	4.30
NOx	42.71
SO2	4.95
CO	2.10



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

DRAFT

**Air Pollution Permit-to-Install and Operate
for
BAKERY FEEDS**

Facility ID: 0387000386
Permit Number: P0105879
Permit Type: Initial Installation
Issued: 2/19/2010
Effective: To be entered upon final issuance
Expiration: To be entered upon final issuance



Air Pollution Permit-to-Install and Operate
for
BAKERY FEEDS

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0105879

Facility ID: 0387000386

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0387000386

Application Number(s): A0038911

Permit Number: P0105879

Permit Description: Installation of a scrap bakery material recycling facility involving drying with biomass burner; material sizing, blending, and handling operations; and unpaved roadways and parking areas.

Permit Type: Initial Installation

Permit Fee: \$3,700.00 *DO NOT send payment at this time - subject to change before final issuance*

Issue Date: 2/19/2010

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

BAKERY FEEDS
12850 QUARRY RD
North Baltimore, OH 45872-9627

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



Authorization (continued)

Permit Number: P0105879

Permit Description: Installation of a scrap bakery material recycling facility involving drying with biomass burner; material sizing, blending, and handling operations; and unpaved roadways and parking areas.

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

- Emissions Unit ID:** F004
- Company Equipment ID: EP-05
- Superseded Permit Number:
- General Permit Category and Type: Not Applicable

- Emissions Unit ID:** F005
- Company Equipment ID: EP-02
- Superseded Permit Number:
- General Permit Category and Type: Not Applicable

- Emissions Unit ID:** F006
- Company Equipment ID: EP-03
- Superseded Permit Number:
- General Permit Category and Type: Not Applicable

- Emissions Unit ID:** P901
- Company Equipment ID: EP-01
- Superseded Permit Number:
- General Permit Category and Type: Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0105879

Facility ID: 0387000386

Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions



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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

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



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

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0105879

Facility ID: 0387000386

Effective Date: To be entered upon final issuance

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

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

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

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0105879

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Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0105879

Facility ID: 0387000386

Effective Date: To be entered upon final issuance

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0105879

Facility ID: 0387000386

Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. F004, EP-05

Operations, Property and/or Equipment Description:

Unpaved roadways and parking areas

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

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

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

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	None [see b)(2)a.]
b.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)b.
c.	OAC rule 3745-17-07(B)	None [see b)(2)c.]
d.	OAC rule 3745-17-08(B)	None [see b)(2)d.]

(2) Additional Terms and Conditions

a. The “Best Available Technology (BAT)” requirements under OAC rule 3745-31-05(A)(3) are not applicable to the particulate emissions emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS.

b. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions of particulate matter ten microns or less in size (PM10) from this emissions unit since the uncontrolled potential to emit for PM10 is less than ten tons per year.



- c. This emissions unit is exempt from the visible particulate emissions (PE) limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- d. This emissions unit is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.



2. F005, EP-02

Operations, Property and/or Equipment Description:

Blending Stock and Biomass Fuel Receiving

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

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

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

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	None [see b)(2)a.]
b.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)b.
c.	OAC rule 3745-17-07(B)	None [see b)(2)c.]
d.	OAC rule 3745-17-08(B)	None [see b)(2)d.]

(2) Additional Terms and Conditions

a. The “Best Available Technology (BAT)” requirements under OAC rule 3745-31-05(A)(3) are not applicable to the air contaminant(s) emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Emissions unit F002 emits particulate emissions (also referred to as total suspended particulate or particulate matter) which is an air contaminant that does not involve an established NAAQS.

b. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions of particulate matter ten microns or less in size (PM10) from this emissions unit since the uncontrolled potential to emit for PM10 is less than ten tons per year.



- c. This emissions unit is exempt from the visible particulate emissions (PE) limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- d. This emissions unit is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.



3. F006, EP-03

Operations, Property and/or Equipment Description:

Finished Product Shipping

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

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

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

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	None [see b)(2)a.]
b.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)b.
b.	OAC rule 3745-17-07(B)	None [see b)(2)c.]
c.	OAC rule 3745-17-08(B)	None [see b)(2)d.]

(2) Additional Terms and Conditions

a. The “Best Available Technology (BAT)” requirements under OAC rule 3745-31-05(A)(3) are not applicable to the air contaminant(s) emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Emissions unit F002 emits particulate emissions (also referred to as total suspended particulate or particulate matter) which is an air contaminant that does not involve an established NAAQS.

b. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions of particulate matter ten microns or less in size (PM10) from this emissions unit since the uncontrolled potential to emit for PM10 is less than ten tons per year.



- c. This emissions unit is exempt from the visible particulate emissions (PE) limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- d. This emissions unit is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.



4. P901, EP-01

Operations, Property and/or Equipment Description:

Scrap bakery recycling operation: raw material unloading and blending; 45 mmBtu/hr sawdust, peanut biomass and paper/plastic fired biomass burner; 50 tph scrap bakery rotary dryer controlled by two regenerative thermal oxidizers; bakery meal grinding and screening; cooling; transferring and conveying; and bakery meal storage

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

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

a. b)(1)b., b)(1)c., b)(1)j., b)(2)c., b)(2)d., b)(2)e., d)(5), d)(6), d)(7), and d)(8).

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

a. b)(1)a., b)(2)a., c)(1), d)(1), d)(2), d)(3), d)(4), e)(1), e)(2), f)(3)a., f)(3)b., f)(3)c., f)(3)d., f)(3)e., f)(3)f. and f)(3)i.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	22.82 pounds volatile organic compound (VOC) per hour; 16.70 pounds of particulate matter 10 microns or less in size (PM10) per hour. [see b)(2)b., b)(2)c. and b)(2)l.] See b)(2)a. and c)(1).
b.	ORC 3704.03(T)	9.75 pounds nitrogen oxides (NO _x) per hour [see b)(2)e.i.] 4.30 tons fugitive PM10 per year [see b)(2)e.ii. and b)(2)g.] See b)(2)e.iii.
c.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)d.
d.	OAC rule 3745-17-11(B)	Cooling screw product recovery cyclone:



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		44.6 pounds particulate emissions (PE) per hour (see b)(2)f.)
		Paper/plastic separation product recovery cyclone: 44.6 pounds PE per hour (see b)(2)f.)
		Scrap bakery rotary dryer controlled by RTOs – The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D) [see b)(2)f]
e.	OAC rule 3745-17-07(A)	Visible PE (from the cooling screw product recovery cyclone stack) shall not exceed 20% opacity as a six-minute average except as provided by rule [see b)(2)g.]..
		Visible PE (from the paper/plastic separation product recovery cyclone) shall not exceed 20% opacity as a six-minute average except as provided by rule [see b)(2)g.]..
		The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D) for the scrap bakery rotary dryer controlled by RTOs.
f.	OAC rule 3745-17-08(A)	See b)(2)h.
g.	OAC rule 3745-17-07(B)	See b)(2)i.
h.	OAC rule 3745-18-06(E)(2)	427.90 pounds sulfur dioxide (SO ₂) per hour [see b)(2)j.]
i.	ORC 3704.03(F) and OAC rule 3745-114-01	See d)(5), d)(6), d)(7) and d)(8).

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable emission limitations for purposes of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration (PSD) and Title V applicability. The federally enforceable emission limitations are based on the operational restrictions contained in c)(2) which require emissions control:

- i. 22.82 pounds VOC per hour;
- ii. 16.70 pounds PM₁₀ per hour;

Each pound per hour limitation above represents a combined mass emission rate from two regenerative thermal oxidizers (RTO) which are operated in a parallel design configuration [see c)(2)].



All emissions of particulate matter from the RTOs are PM10.

- iii. Visible PE (from a single stack serving the two RTOs) shall not exceed 10% opacity, as a six-minute average. The visible emission restriction is applicable during periods of time when an RTO(s) is undergoing “burn-out” maintenance activity.

The federally enforceable emission limitations established above result in an annual PTE of 99.95 tons for VOC and 73.15 tons for PM10. Annual PTE levels were determined by multiplying the federally enforceable pound per hour emission limitations by a maximum operating schedule of 8,760 hours per year and dividing by 2,000 pounds per ton.

It should be noted that the PM10 emission limitation and visible restriction requirement above applies at all times including periods when an RTO is undergoing “burn-out” maintenance activities.

- b. The scrap bakery rotary dryer is controlled by a thermal oxidization control system consisting of two separate RTOs operated in a parallel design configuration. The control system is designed with a parallel configuration to allow for an individual RTO to be taken “off-line” to allow for maintenance (i.e. burn-out) or other downtime activity while the second RTO is “on-line/providing control” for the drying operation. When only one RTO is “on-line/providing control” the operating level of the drying operation must be reduced to meet the requirements identified in c)(1)c.

The permittee will be required to demonstrate compliance with the minimum residence time requirement in c)(1)d. when a single RTO is “on-line/providing control”. The permittee shall submit information indicating how on-going compliance will be demonstrated as indicated above. The submission may involve a demonstration that the physical design of the system results in inherent compliance which could be shown through testing or a monitoring and record keeping plan, etc. The demonstration of compliance must be approved by the Ohio EPA prior to operation of the scrap bakery rotary dryer.

- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) are not applicable to the particulate emissions emitted from this emissions units BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS.
- d. The BAT requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the emissions of carbon monoxide (CO) and sulfur dioxide (SO2) from this emissions unit since the uncontrolled potential to emit for CO and SO2 is less than 10 tons per year.
- e. The BAT requirements under ORC 3704.03(T) have been determined to be the following:



- i. a mass emission rate limitation of 9.75 pounds per hour for NO_x emissions from the scrap bakery waste rotary dryer controlled by RTOs. The pound per hour limitation represents a combined mass emission rate from two RTOs which are operated in a parallel design configuration [see c)(2)].
- ii. a mass emission rate limitation of 4.30 tons per year of fugitive PM₁₀ from the bakery waste recycling operation (material handling).

The mass emission rate limitations above represent the potentials to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design). Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations. See f)(2)g. and f)(2)n. for details regarding the potentials to emit.

- iii. compliance with the pound per hour limitations for VOC and PM₁₀ established under OAC rule 3745-31-05(D).
- f. PE are generated by and emitted from three single specific processes in the scrap bakery recycling operation as identified below:
- i. a single stack serving the RTOs controlling the biomass burner and the scrap bakery waste rotary dryer.
 - ii. a single stack from a product recovery cyclone associated with cooling screw operations; and
 - iii. a single stack from a product recovery cyclone associated with paper/plastic separation operations.

All emissions of particulate matter from the product recovery cyclones for the cooling screw and paper/plastic separation operations are filterable matter greater than 10 microns in size. The potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for PE from the cooling screw and paper/plastic separations product recovery cyclones is less than the allowable emission limitation established by OAC rule 3745-17-11(B). See f)(2)j and f)(2)k for details regarding the potential to emit for the product recovery cyclones.

It should be noted that the OAC rule 3745-17-11(B) allowable PE limitations were established by Table I of the rule appendix. The uncontrolled mass rate of emission (UMRE) for PE from each of the single specific processes identified above is less than 10 pounds per hour, therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. The UMRE for the scrap bakery rotary dryer is less than 10 pounds per hour despite the 14.52 pounds per hour PM₁₀ limitation established by OAC rule 3745-31-05(D) because over 90% of the particulate matter is condensable. Based on the definition in OAC rule 3745-17-01 condensable particulate matter cannot be considered as PE.



- g. The individual stacks serving the paper/plastic separation and cooling screw product recovery cyclones exhaust into the building housing the process. In addition, there are fugitive emissions from the material handling process (i.e. trailer dump/front-end loader/mobile equipment to raw material storage, mobile equipment to belt conveyor, screw conveyor across rotary magnet) that are contained within the building housing the process. Any required visible PE determinations shall be performed on building egress points (i.e. building windows, doors, roof monitors, etc.) serving the material handling process, paper/plastic separation and cooling screw separation operations [see d)(9)].
- h. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- i. This emissions unit is exempt from the visible PE limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.
- j. The potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for SO₂ from the scrap bakery waste rotary dryer and associated burner is less than the allowable emission limitation established by OAC rule 3745-18-06(E)(2). See f)(3)h. for details regarding the potential to emit for SO₂ emissions.
- k. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by the physical and operational design of scrap bakery waste rotary dryer, associated burner and the regenerative thermal oxidization control system.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- l. Prevention of Significant Deterioration (PSD) requirements for particulate matter equal to or less than 2.5 microns in size (PM_{2.5}) are being implemented through the PM₁₀ Surrogate Policy issued by EPA in 1997. For purposes of demonstrating that PM₁₀ is a reasonable surrogate for PM_{2.5}, all emissions of PM₁₀ will be considered PM_{2.5}.

c) Operational Restrictions

- (1) The following operational restrictions are being established for purposes of establishing federally enforceable requirements which limit PTE [see b)(2)a.]. All exhaust gas from the scrap bakery rotary dryer shall be controlled by thermal oxidation. The thermal oxidation control system shall consist of two separate regenerative thermal oxidizers



(RTO) operated in a parallel design configuration. The thermal oxidation control system shall meet the following requirements:

- a. each RTO shall achieve a minimum destruction efficiency of 95% for VOC;
- b. each RTO shall achieve a maximum outlet concentration of 0.0278 gr/dscf for PM10;
- c. the thermal oxidation control system shall be designed and operated such that each individual RTO has a minimum residence time of 0.90 seconds;
- d. the thermal oxidation control system shall achieve a 100 % capture efficiency.
- e. during periods of start-up* of the dryer burner, only natural gas/propane fuel shall be fired in the burner.

*Start-up shall be defined as that period of time beginning when the natural gas/propane fuel is first ignited in the biomass burner until such a time as the dryer ID fan is turned on..

It should be noted that the operational restrictions contained in c)(1)a. and c)(1)b. above apply to each RTO as individual units. The operational restrictions are in contrast to the mass emission limitations contained in b)(2)a. which represent emission rates from both RTOs combined.

- (2) To ensure proper operation of the emissions unit during start-up, the permittee shall employ an "interlock system" that will shut down the emissions unit when solid fuel (i. e. sawdust, paper/plastic, peanut biomass) is employed prior to the dryer ID fan being initiated.

The "interlock system" shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations with any modifications deemed necessary by the permittee.

- (3) The permit to install for emissions unit P901 was evaluated based on the fuels and raw materials consisting of sawdust, paper/plastics, peanut biomass, natural gas/propane, blending stock and scrap bakery materials. Scrap bakery materials consist of breads, pizza/pasta, cookies/crackers, cereals, jellies, candies, and other grain or vegetable based materials. Prior to any change (or any other physical change in, or change in the method of operation) in raw materials, the permittee shall conduct an evaluation to determine if the change would constitute a "modification" as defined in OAC rule 3745-31-01. If the change(s) in raw materials or any physical change in, or change(s) in the method of operation is (are) defined as a modification, then the permittee shall obtain a final permit to install modification prior to the change. The permittee shall collect, record and retain any information and the final determination when modification evaluations are performed.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable combustion temperature, based on a rolling, 3-hour average, within an individual RTO, during any period of time when the individual RTO is "on-



line/providing control” and the scrap bakery waste rotary dryer is in operation, shall not be less than the average temperature determined (in degrees Fahrenheit) during the most recent compliant stack test. Until compliance testing has been conducted, the RTO(s) shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

- (2) The permittee shall properly install, operate, and maintain continuous temperature monitor(s) and recorder(s) that measure and record the combustion temperature within each individual RTO when the RTO is “on-line/providing control” and the scrap bakery waste rotary dryer is in operation, including periods of startup and shutdown. The permittee shall record the combustion temperature, in degrees Fahrenheit, within each individual RTO at least once every fifteen (15) minutes. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor(s) and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The acceptable temperature setting shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate temperature value is established to demonstrate compliance. Following compliance testing, the permittee shall collect and record the following information daily for each individual RTO when the individual RTO is “on-line/providing control” and the scrap bakery waste rotary dryer is in operation:
 - a. all rolling, 3-hour blocks of time, when the individual RTO was “on-line/providing control” and the scrap bakery waste rotary dryer was in operation, during which the average combustion temperature within the individual RTO was below the average temperature established during the most recent performance test that demonstrated compliance;
 - b. a log (date and time period) of the following for each individual RTO when the RTO was “on-line/providing control” and the scrap bakery waste rotary dryer was in operation:
 - i. downtime or bypass of the capture (collection) system;
 - ii. downtime or bypass of the RTO;
 - iii. downtime of the monitoring equipment;
 - c. a log (date and time period) when an individual RTO was “off-line” and the scrap bakery waste rotary dryer was in operation.
- (3) Whenever the monitored average combustion temperature within an RTO deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
 - a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;



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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the temperature readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

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

- (4) The permittee shall collect and record the date and time period for each start-up [as defined in c)(1)e.] operation for the dryer burner.
- (5) The permittee shall maintain a log for the interlock system that identifies each time period when solid fuel (i. e. sawdust, paper/plastic, peanut biomass) is employed prior to the dryer ID fan being initiated, and the emissions unit was not shut down.
- (6) The federally enforceable permit-to-install and operate (FEPTIO) application for this emissions unit, P901, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion



model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

where; X = 24 and Y = 7

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year):

Toxic Contaminant: Hydrogen chloride (HCl)

TLV (mg/m3): 2.89 mg/m3

Maximum Hourly Emission Rate (lbs/hr): 0.36 lb/hour

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.8282 ug/m3

MAGLC (ug/m3): 71 ug/m3

The permittee, has demonstrated that emissions of hydrogen chloride, from emissions unit P901, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination



that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

The permittee shall perform weekly checks, when the cooling screw product recovery cyclone, paper/plastic separation product recovery cyclone, and/or material handling processes (i.e. trailer dump/front-end loader/mobile equipment to raw material storage, mobile equipment to belt conveyor, screw conveyor across rotary magnet) are in operation and when the weather conditions allow, for any visible particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this process. The presence or absence of any visible fugitive emissions from building egress points shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d)(9)d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (9) The permittee shall perform a check during each “burn-out” maintenance activity performed on an RTO, for any visible PE from the stack serving the RTO. 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. identification of RTO undergoing “burn-out”
 - b. the color of the emissions;
 - c. the total duration of any visible emission incident; and
 - d. any corrective actions taken to minimize or eliminate the visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:



- a. all deviations (excursions) of the following emission limitations and/or operational restrictions that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. 22.82 pounds VOC per hour;
 - ii. 16.70 pounds PM10 per hour;
 - iii. visible particulate emissions (from a single stack serving the two incinerators) shall not exceed 10% opacity as a six-minute average;
 - iv. each RTO shall achieve a minimum destruction efficiency of 95% for VOC;
 - v. each RTO shall achieve a maximum outlet concentration of 0.0278 gr/dscf for PM10;
 - vi. the thermal oxidation control system shall be designed and operated such that each individual RTO has a minimum residence time of 0.90 seconds;
 - vii. the thermal oxidation control system shall achieve a 100% capture efficiency;
 - viii. all periods of time when soild fuel (i. e. sawdust, paper/plastic, peanut biomass) was employed prior to the dryer ID fan being initiated, and the emissions unit failed to shut down.
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31, April 30, July 31, and October 31, and shall cover the previous calendar quarters unless an alternative schedule has been established and approved by the Director (Ohio EPA, Northwest District Office).

- (2) The quarterly deviation (excursion) reports indentified in e)(1) shall include the following:
 - a. all rolling 3-hour periods (when the scrap bakery rotary dryer was in operation) during which the average combustion temperature within an individual RTO deviated from range/limit specified by the manufacturer and/or deviated from the average temperature established during the most recent performance test that demonstrated compliance;
 - b. any records of downtime (date and length of time) for the capture (collection) system, downtime or bypass of an individual RTO "on-line/providing control",



and/or the monitoring equipment when the scrap bakery rotary dryer was in operation; and

- c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within an individual RTO into compliance with the acceptable range/limit, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s).
- (3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The PER summarizes activity over a 12-month period for permit requirements that are not addressed by the quarterly deviation reports contained in e)(1) and e)(2) above. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

The permittee shall provide the following information in the annual PER regarding visible emissions from emissions unit P901:

- a. identification of all days during which any visible particulate emissions were observed from building egress points (i.e., building windows, doors, roof monitors, etc.) serving the cooling screw product recovery cyclone, paper/plastic separation product recovery cyclone and material handling process (i.e. trailer dump/front-end loader/mobile equipment to raw material storage, mobile equipment to belt conveyor, screw conveyor across rotary magnet) and describe any corrective actions taken to minimize or eliminate the visible particulate emissions.
 - b. identification of all times during which any visible particulate emissions were observed from the stack serving an RTO undergoing “burn-out” maintenance activities and describe any corrective actions taken to minimize or eliminate the visible particulate emissions.
- (4) Within 180 days of achieving the emissions unit’s maximum production rate, the permittee shall provide the Director (Ohio EPA, Northwest District Office) with the following for review:
- a. a Standard Operating Procedures guide, outlining the proper procedures for operating the emissions unit so that compliance is ensured; and
 - b. a Preventative Maintenance Plan for the emissions unit and its air pollution control equipment.



f) Testing Requirements

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

- a. The emission testing shall be conducted within 180 days after initial startup of the emissions unit. Testing time frame(s) specified may be amended or waived for cause upon prior request of, and written approval of, the Ohio EPA Northwest District Office.
- b. The emission testing shall be conducted to demonstrate compliance with the following:
 - i. each RTO shall achieve a minimum destruction efficiency of 95% for VOC;
 - ii. each RTO shall achieve a maximum outlet concentration of 0.0278 gr/dscf for PM10;
 - iii. a combined emission rate of 22.82 pounds VOC per hour from the two RTOs;
 - iv. a combined emission rate of 16.70 pounds PM10 per hour from the two RTOs;
 - v. a combined emission rate of 9.75 pounds NOx per hour from the two RTOs;
 - vi. 100% capture efficiency for the regenerative thermal oxidation control system.
- c. The emission testing shall also involve a determination of the combined emission rate of CO from the two RTOs.
- d. The following test method(s) shall be employed to meet the testing requirements above:

PM10 - Methods 201/201A and 202 of 40 CFR Part 51, Appendix M;

NOx - Methods 1-4 and 7 of 40 CFR Part 60, Appendix A;

CO -Methods 1-4 and 10 of 40 CFR Part 60, Appendix A;

VOC - Methods 1-4 and 18, 25, or 25A, as applicable of 40 CFR Part 60, Appendix A.

Capture efficiency

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

The test method(s) which must be employed to demonstrate compliance with the destruction and capture efficiency requirements for VOC are specified below



- e. The destruction efficiency (i.e., the percent reduction in mass emissions between the inlet and the outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25 A of 40 CFR Part 60, Appendix A. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
 - f. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
 - g. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.
 - h. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).
 - i. Personnel from the appropriate Ohio EPA District Office or local air agency 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.
 - j. 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.
- (2) Future testing requirements shall be conducted in accordance with applicable rules, polices, etc. (i.e. Engineering Guide #16, OAC rule 3745-15-04, etc.). Testing time



frame(s) specified may be amended or waived for cause upon prior request of, and written approval of, the Ohio EPA Northwest District Office.

(3) Compliance with the emission limitation(s) in Section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
22.82 pounds VOC per hour

Applicable Compliance Method:

Compliance with the pound per hour emission limitation shall be determined based on the results of emission testing conducted in accordance with the test methods and procedures of 40 CFR Part 60, Appendix A, Methods 1-4, and 18, 25 or 25A as applicable [see Testing Requirements in f)(1)].

b. Emission Limitation:
Each RTO shall achieve a minimum destruction efficiency of 95% for VOC.

Applicable Compliance Method:

Compliance with the destruction efficiency (i.e., the percent reduction in mass emissions between the inlet and the outlet of the control system) shall be determined based on the results of emission testing conducted in accordance with the test methods and procedures specified in Methods 18, 25, or 25 A of 40 CFR Part 60, Appendix A. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. [see Testing Requirements in f)(1)].

c. Emission Limitation:
The thermal oxidation control system shall be designed and operated such that each individual RTO has a minimum residence time of 0.90 seconds;

Applicable Compliance Method:

Compliance with the residence time requirement shall be determined using RTO design data and the volumetric air flow results obtained from required stack testing.

d. Emission Limitation:
Each RTO shall achieve a maximum outlet concentration of 0.0278 gr/dscf for PM10.

Applicable Compliance Method:

Compliance with the maximum outlet concentration limitation shall be determined based on the results of emission testing conducted in accordance with Methods 201/201A and 202 of 40 CFR Part 51, Appendix M [see Testing Requirements in f)(1)].

e. Emission Limitation:
16.70 pounds PM10 per hour



Applicable Compliance Method:

Compliance with the pound per hour limitation shall be determined based on the results of emission testing conducted in accordance with Methods 201/201A and 202 of 40 CFR Part 51, Appendix M [see Testing Requirements in f)(1)].

f. Emission Limitation:

The thermal oxidation control system shall achieve a 100% capture efficiency.

Applicable Compliance Method:

Compliance with the capture efficiency shall be determined based on the results of emission testing conducted using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) [see Testing Requirements in f)(1)].

g. Emission Limitation:

9.75 pounds NO_x per hour

Applicable Compliance Method:

The hourly limitation represents the potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design) and was established by stack testing results of a similar unit. Compliance with the lb/hr limitation shall be determined based on the results of emission testing conducted in accordance with the test methods and procedures of 40 CFR Part 60, Appendix A, Methods 1-4, and 7 [see Testing Requirements in f)(1)].

h. Emission Limitation:

427.90 pounds SO₂ per hour

Applicable Compliance Method:

The potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for SO₂ from this emissions unit is less than the allowable limitation established by OAC rule 3745-18-06(E)(2) and therefore compliance is assured. The potential to emit is based on an AP-42 emission factor of 0.025 pounds SO₂ per mmBtu [Table 1.6-2 (9/03)] and a maximum heat input of 45 mmBtu per hour. If required a determination of the SO₂ potential to emit shall be determined in accordance with the test methods and procedures of 40 CFR Part 60, Appendix A, Methods 1-4, and 6.

i. Emission Limitation:

Visible particulate emissions (from a single stack serving the two RTOs) shall not exceed 10% opacity as a six-minute average. The visible emission restriction is applicable during periods of time when an RTO(s) is undergoing "burn-out" maintenance activity.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.



- j. Emission Limitation:
44.6 pounds PE per hour from cooling screw product recovery cyclone.

Applicable Compliance Method

The potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for PE from this emissions unit is less than the allowable limitation established by OAC rule 3745-17-11(B) and therefore compliance is assured. The potential to emit is based on a recovery efficiency of 99.99% for the product recovery cyclone and a maximum process weight rate of 100,000 pounds of “finished meal” product per hour. If required a determination of the PE potential to emit shall be determined in accordance with the test methods and procedures of 40 CFR Part 60, Appendix A, Methods 1-5.

- k. Emission Limitation:
44.6 pounds PE per hour from paper/plastic product recovery cyclone.

Applicable Compliance Method:

The potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for PE from this emissions unit is less than the allowable limitation established by OAC rule 3745-17-11(B) and therefore compliance is assured. The potential to emit is based on an a recovery efficiency of 98% for the product recovery cyclone, a maximum process weight rate of 1,000 pounds of paper/plastic processed per hour, and a company supplied emission factor of 0.04 pound PE per pound of “finished meal” paper/plastic separated. If required a determination of the PE potential to emit shall be determined in accordance with the test methods and procedures of 40 CFR Part 60, Appendix A, Methods 1-5.

- l. Emission Limitation:
Visible PE (from the cooling screw product recovery cyclone stack) shall not exceed 20% opacity as a six-minute average except as provided by rule [see b)(2)g.].

Applicable Compliance Method:

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.

- m. Emission Limitation:
Visible PE (from the paper/plastic separation product recovery cyclone) shall not exceed 20% opacity as a six-minute average except as provided by rule [see b)(2)g.].

Applicable Compliance Method:

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.

- n. Emission Limitation:
4.30 tons per year of fugitive PM10 from the bakery waste recycling operation.

Applicable Compliance Method:

The annual limitation represents the potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design)



State of Ohio Environmental Protection Agency
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therefore compliance with the limitation is assured. The annual limitation was developed by applying a 70 % control efficiency for building enclosure to uncontrolled fugitive PM10 generated by the bakery waste recycling operation. The uncontrolled fugitive PM10 generated by the bakery waste recycling operation was calculated by multiplying the maximum potential throughput for each material handling/processing operation by AP-42 emission factors from Table 9.9.1-1 and Table 9.9.1-2. (4/03).

g) Miscellaneous Requirements

(1) None.