John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

5/9/2014

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Matt Gaietto
Pepperidge Farm Inc.
3320 State Route 103 E
Willard, OH 44890

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0339030011
Permit Number: P0116807
Permit Type: Administrative Modification
County: Huron

Dear Permit Holder:

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

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

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA
Ohio EPA-NWDO; Michigan; Canada

FINAL

Division of Air Pollution Control
Permit-to-Install
for
Pepperidge Farm Inc.

Facility ID:	0339030011
Permit Number:	P0116807
Permit Type:	Administrative Modification
Issued:	5/9/2014
Effective:	5/9/2014

Division of Air Pollution Control
Permit-to-Install
for
Pepperidge Farm Inc.

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. Federally Enforceable Standard Terms and Conditions 4
2. Severability Clause 4
3. General Requirements 4
4. Monitoring and Related Record Keeping and Reporting Requirements 5
5. Scheduled Maintenance/Malfunction Reporting 6
6. Compliance Requirements 6
7. Best Available Technology 7
8. Air Pollution Nuisance 8
9. Reporting Requirements 8
10. Applicability 8
11. Construction of New Sources(s) and Authorization to Install 8
12. Permit-To-Operate Application 9
13. Construction Compliance Certification 10
14. Public Disclosure 10
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 10
16. Fees 10
17. Permit Transfers 10
18. Risk Management Plans 10
19. Title IV Provisions 10
B. Facility-Wide Terms and Conditions 11
C. Emissions Unit Terms and Conditions 13
1. P001, Cracker Line 4 14
2. P003, Biscuit (Cookie) Line 3 28
3. P005, Cracker Line 5 31
4. P006, Cracker Line 6 44
5. Emissions Unit Group -A: P004,P007,P008, ... 58

Authorization

Facility ID:	0339030011
Facility Description:	Cookie and cracker production
Application Number(s):	M0002769
Permit Number:	P0116807
Permit Description:	Agency-initiated administrative modification to correct the natural gas heating value used to calculate the potential to emit for emissions units P003, P004, P007 and P008 (bake ovens).
Permit Type:	Administrative Modification
Permit Fee:	$0.00
Issue Date:	5/9/2014
Effective Date:	5/9/2014

This document constitutes issuance to:

Pepperidge Farm Inc.
3320 State Route 103 E
Willard, OH 44890

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

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

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

The above named entity is hereby granted a Permit-to-Install for the 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 emissions unit(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 and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

Authorization (continued)

Permit Number: P0116807
Permit Description: Agency-initiated administrative modification to correct the natural gas heating value used to calculate the potential to emit for emissions units P003, P004, P007 and P008 (bake ovens).

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

Emissions Unit ID:	**P003**
Company Equipment ID:	Biscuit (Cookie) Line 3
Superseded Permit Number:	03-13298
General Permit Category and Type:	Not Applicable

Group Name: A

Emissions Unit ID:	**P004**
Company Equipment ID:	Biscuit (Cookie) Line 1
Superseded Permit Number:	03-13298
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P007**
Company Equipment ID:	Pretzel (unleavened products) Line 7
Superseded Permit Number:	03-13298
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P008**
Company Equipment ID:	Biscuit (Cookie) Line 2
Superseded Permit Number:	03-13298
General Permit Category andType:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

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

e) 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 or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

b) 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.

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emissionlimitations, operationalrestrictions, andcontroldeviceoperatingparameterlimitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northwest District Office. The written 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. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, andreportingrequirements contained in this permit shall be submitted to the Ohio EPA DAPC, Northwest District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to theOhio EPA DAPC, Northwest District Officein accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted

local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

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

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c) The permittee shall submit progress reports to the Ohio EPA DAPC, Northwest District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.

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 state-only required 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 Ohio EPA DAPC, Northwest District Office. 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 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.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s)not exempt from the requirement to obtain a Permit-to-Install.

11. Construction of New Sources(s) and Authorization to Install

a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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.

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. 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 permittee shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., 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) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as “permanently shut down” in “Air Services” along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., 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). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted,no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d)must be <u>obtained before</u>operating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be enteredupon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. 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.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

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 quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. 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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed.The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

2. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit to install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-31, and 3745-17:

   a) B001 – Natural Gas Fired Boiler Nos. 1-4 (4MMBtu/hr each).

   [OAC rule 3745-77-07(A)(13)]

3. Pursuant to 40 CFR Part 64, the permittee has submitted, and the Ohio EPA has approved a compliance assurance monitoring plan for emissions units P001, P005, and P006 at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

   [40 CFR Part 64]

C. Emissions Unit Terms and Conditions

1. P001, Cracker Line 4

Operations, Property and/or Equipment Description:

Commercial bakery production line (Cracker Line No 4) with direct-fired oven

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) d)(8) through d)(11) and e)(2).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) [PTI #P0114883 issued on 6/10/13]	Emissions from baking: Controlled: 2.72 pounds organic compounds (OC)/hour, 11.94 tons OC/year Uncontrolled: 18.11 pounds OC/hour, 79.33 tons OC/year See b)(2)a., b)(2)h., and c)(1).
b.	ORC 3704.03(T)	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Emissions from combustion: 1.11 pounds nitrogen oxides (NOx)/hour, 4.9 tons NOx/year 0.93 pounds carbon monoxide (CO)/hour, 4.1 tons CO/year See b)(2)c. and b)(2)d.
d.	OAC rule 3745-31-05(A)(3), as effective 12/1/06	See b)(2)e.
e.	OAC rule 3745-17-11(B)(1)	See b)(2)f.
f.	OAC rule 3745-17-07(A)	See b)(2)g.
g.	ORC 3704.03(F), and OAC rule 3745-114-01	See d)(8) through d)(11) and e)(2).
h.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7) and e)(1).

(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). The federally enforceable emission limitations are based on the operational restrictions contained in c)(1) which require emissions control:

i. Controlled: 2.68 pounds OC/hour, 11.72 tons OC/year;

ii. Uncontrolled: 17.84 pounds OC per hour and 78.14 tons OC per year.

b. This air contaminant source has the potential to emit, taking into account air pollution controls installed on the source, of ten or more tons per year of volatile organic compounds (VOC), and as such, shall meet the requirements of ORC 3704.03(T). The Best Available Technology (BAT) requirements established under ORC 3704.03(T) have been determined to be the compliance with the mass emission limitations and operational restrictions established under OAC rule 3745-31-05(D).

c. The BAT requirements under OAC rule 3745-31-05(A)(3), effective 11/30/01 have been determined to be the following:

i. use of catalytic oxidation for control of OC emission [see c)(1)]:

ii. 1.11 pounds NOx per hour and 4.9 tons NOx per year;

iii. 0.93 pound CO per hour and 4.1 tons CO per year;

iv. compliance with the requirements established under OAC rule 3745-31-05(D).

- When initially installed, this emissions unit was controlled by regenerative thermal oxidation (RTO). The permittee has proposed to replace the existing RTOs with a catalytic oxidizer while maintaining the same destruction efficiency that was previously established. The Ohio EPA considers the use of catalytic oxidation as an equivalent form of control.

d. The permittee satisfied the BAT requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by 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 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.

e. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of the OAC rule 3745-31-05 as part of the State Implementation Plan. The BAT requirements under OAC rule 3745-31-05(A)(3)(a), effective December 1, 2006 do not apply to the emissions of carbon monoxide (CO) and nitrogen oxides (NOx) from this emissions unit since the uncontrolled potential to emit for CO and NOx is less than 10 tons per year.

It should be noted that this air contaminant source has emissions of sulfur dioxide (SO2) and particulate matter 10 microns or less in size (PM10) which are associated with the combustion of natural gas. The potential emissions of SO2 and PM10 are negligible and therefore have not been addressed within this permit.

f. The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Huron County, which is identified as a P-3 county.

g. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

h. All OCs are assumed to be VOCs.

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.]:

a. The permittee shall install, operate, and maintain a catalytic oxidation control system for the purpose of controlling OC emissions from this emissions unit. The catalytic oxidation control system shall reduce OC emissions from the bakery oven by at least ninety-five per cent by weight (i.e., an overall control efficiency of at least 95% by weight). For purposes of meeting the ninety-five per cent by weight overall control efficiency, the permittee has indicated that the OC emission control system will achieve a 100% capture efficiency for emissions from the bakery oven which will be reduced by at least ninety-five per cent by catalytic oxidation.

b. The oven shall be constructed and maintained in such a manner as to have a totally enclosedbaking chamber, such that all volatile organic compound emissions are captured, contained, and directed to the oxidation control system (100% capture efficiency).

c. The ovenshall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.013 mm Hg (0.007 in. H2O), whenever the emissions unit is in operation.

[OAC rule 3745-77-07(C)(1) and PTI #P0114883]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain continuous temperature monitors and recorder(s) that measure and record(s) the temperature immediately upstream and downstream of the oxidizer's catalyst bed when the emissions unit is in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. 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 monitors 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 and the average temperature difference across the catalyst bed shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate valuesare established to demonstrate compliance.Following compliance testing, the permittee shall collect and record the following information each day the emissions unit is in operation:

a. all 3-hour blocks of time, when the emissions unit controlled by the catalytic oxidizer was in operation, during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was compliance;

b. all 3-hour blocks of time, when the emissions unit controlled by the catalytic oxidizer was in operation, during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference measured during the most recent performance test that demonstrated the emissions unit was in compliance; and

c. a log or record of (i) the downtime of the control equipment, (ii) any operational problems and/or malfunctions which reduce the effective control efficiency of the oxidizer, and (iii) the average control efficiency of the oxidizer, if less than the normally expected control efficiency.

These records shall be maintained at the facility for a period of not less than two years.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114883]

(2) The permittee shallinstall, operate, and maintain monitoring devices and a recorder that continuously monitor and record the differential pressure between the inside and outside of the oven when the emissions unit is in operation. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the

manufacturer's recommendations, instructions, and operating manuals, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day:

a. all three-hour blocks of time during which the difference in pressure between the oven and the surrounding areas is not maintained at or above the minimum pressure differential of 0.007 inches of water, as a three-hour average; and

b. a log or record of downtime for the capture (collection) system when the emissions unit was in operation.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114883]

(3) Whenever the monitored average temperature of the exhaust gases immediately before the catalyst bed, the average temperature difference across the catalyst bed, or thedifferential pressure between the inside and outside of the oven 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(s)/limit(s) specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the temperature of the exhaust gases immediately before the catalyst and the average temperature difference across the catalyst bed,or the differential pressure between the inside and outside of the oven immediately after the corrective action was implemented;and

k. the name(s) of the personnel who performed the work.

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

The temperature ranges and differential pressure are 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 range(s) based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) of the controlled pollutant(s). In addition, approved revisions to the range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114883]

(4) The permittee shall measure, document/calculate, and maintain a permanent record of the following information for theoven, which may be the same record documented during the compliance test(s):

a. the measured diameter of each natural draft opening;

b. the distance measured from each natural draft opening to each OC emitting point;

c. the total calculated surface area of all natural draft openings and the surface area of the enclosures, four walls, floor, and ceiling;

d. the calculation or demonstration that the distance from each OC emitting point to each natural draft opening is at least 4 times the diameter of the opening; and

e. the calculation demonstrating that the sum of the surface areas of all of the natural draft openings to the enclosure is not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114883]

(5) The CAM plan for this emissions unit has been developed for volatile organic compounds. The CAM performance indicators for the catalytic oxidizer controlling this emissions unit are the combustion temperature and pressure differential, which were established in accordance with the manufacturer's recommendations. When the combustion temperature or pressure differential shows operation outside the indicator range(s), the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the appropriate Ohio EPA District Office or local air agency, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(8) The PTIapplication for this emissions unit, P001, 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 x 8/X x 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: Acetaldehyde

TLV (mg/m3): 25 ppm, 45,059 ug/m3

Maximum Hourly Emission Rate (lbs/hr): 0.78 lb/hour*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 362ug/m3

MAGLC (ug/m3): 791 ug/m3

*Modeling was conducted on the combined emissions of P001, P005, P006, and P011.

The permittee, has demonstrated that emissions of acetaldehyde from emissions unit P001 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).

[PTI #P0114883]

(9) 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 PTI 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.

[PTI #P0114883]

(10) 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.

[PTI #P0114883]

(11) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[PTI #P0114883]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. all 3-hour blocks of time, when the emissions unit was in operation, during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was compliance;

b. all 3-hour blocks of time, when the emissions unit was in operation, during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference measured during the most recent performance test that demonstrated the emissions unit was in compliance;

c. all three-hour blocks of time when the emissions unit was in operation, during which the bakery oven was not maintained at the minimum pressure differential of 0.007 inches of water;

d. any records of downtime (date and length of time) for the capture (collection) system, downtime or bypass of the monitoring equipment when the bakery oven was in operation; and

e. each incident of deviation described in e(1)a.- e(1)c. where:

i. a prompt investigation was not conducted;

ii. prompt corrective action, that would bring the emissions unit into compliance and/or the temperature into compliance with the acceptable range/limit, was determined to be necessary and was not taken;or

iii. proper records were not maintained for the investigation and/or the corrective action(s).

If no deviations (excursions) occurred during a calendar quarter, thepermittee 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).

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114883]

(2) The permittee shall submit annual reports that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the “Toxic Air

Contaminate Statute", ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:

a. the original model input;

b. the updated model input;

c. the reason for the change(s) to the input parameter(s); and

d. a summary of the results of the updated modeling, including the input changes; and

e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[PTI #P0114883]

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 in accordance with the time frame established in PTI #P0114883.

b. The emission testing shall be conducted to demonstrate compliance with the hourly OC limitations, the 95% OC control efficiency and the 75% OC capture efficiency.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for VOC, Methods 1-4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the control efficiency for OC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The captureefficiency 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.) The controlefficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A and Methods 204

through 204F, as specified in 40 CFR Part 51, Appendix M. 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."

e. The test(s) shall be conducted while the emissions unit is operating under "worst case" conditions, which will be approved by the appropriate Ohio EPA District Office or local air agency. The "Intent to Test", as specified below, may serve as the permittee's proposed testing scenario(s).

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).

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.

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.

[OAC rule 3745-77-07(C)(1)and PTI #P0114883]

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

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

Controlled: 2.72 pounds OC/hour, 11.92 tons OC/year

Uncontrolled: 18.11 pounds OC per hour and 79.33 tons OC per year

<u>Applicable Compliance Method:</u>
Compliance with the controlled pound per hour emission limitation shall be determined in accordance with the test methods and procedures specified in f)(1).

The uncontrolled pound per hour emission limitation was calculated by multiplying the maximum production rate of 3.14 tons/hr by the permittee supplied emission factor of 23.08 lbs OC/ton of product, and by factoring out the emissions being captured at the oven [75%, which is represented as (1.0-0.75)]. If required, the permittee shall demonstrate compliance with the hourly emission limitation in accordance with accordance with the test methods and procedures of 40 CFR Part 60, Appendix A, Methods 1-4, and 18, 25 or 25A as applicable and Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M.

The annual emission limitations represent the potential to emit and were developed by multiplying the hourly emission rates by 8760 hours per year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitations, compliance with the annual emission limitations shall also be demonstrated.

b. Emission Limitations:
1.11 pounds NOx per hour, 4.9 tons NOx per year

Applicable Compliance Method:
The hourly emission limitation represents the potential to emit* for this emissions unit. Therefore no monitoring, record keeping, or reporting requirements are required to demonstrate compliance with this limitation.

*The potential to emit for this emissions unit is based on the unit's maximum heat input of 11.33 mmBtu/hour multiplied by the emission factor 0.1 pound NOx/mmBtu from AP-42 Table 1.4-1 (revised 3/98).

If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1 - 4, and 7 of 40 CFR Part 60, Appendix A.

The annual emission limitation represents the potential to emit and was developed by multiplying the hourly emission rate by 8760 hours per year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

c. Emission Limitations:
0.93 pound CO per hour, 4.1 tons CO per year

Applicable Compliance Method:
The hourly emission limitation represents the potential to emit* for this emissions unit. Therefore no monitoring, record keeping, or reporting requirements are required to demonstrate compliance with this limitation.

*The potential to emit for this emissions unit is based on the unit's maximum heat input of 11.33 mmBtu/hour multiplied by the emission factor 0.08 pound CO/mmBtu from AP-42 Table 1.4-1 (revised 3/98).

If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A.

The annual emission limitation represents the potential to emit and was developed by multiplying the hourly emission rate by 8760 hours per year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0114883]

g) Miscellaneous Requirements

(1) This emissions unit does not include the processing of dough prior to loading onto the cracker line.

2. P003, Biscuit (Cookie) Line 3

Operations, Property and/or Equipment Description:

15 million Btu/hour natural gas- (or LPG backup) fired bake oven for biscuit line number 2 (unleavened products)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) [PTI #P0116807, issued on 05/09/14]	<u>OC emissions from baking</u>: none <u>emissions from combustion</u>: 1.47 pounds nitrogen oxides (NOx)/hour, 6.44 tons NOx/year 1.24 pounds carbon monoxides (CO)/hour, 5.43 tons CO/year 0.16 pound organic compounds (OC)/hour), 0.70 ton OC/year
b.	OAC rule 3745-17-11(B)(1)	None [See b)(2)a.]
c.	OAC rule 3745-17-07(A)	None [See b)(2)b.]

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Huron County, which is identified as a P-3 county.

b. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

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

a. Emission Limitations:

1.47 pounds NOx/hour, 6.44 tons NOx/year

Applicable Compliance Method:

The hourly NOx limitation represents the emissions unit's potential to emit based on a maximum heat input of 15 million BTU/hour, a heating value of 1020 btu/scf and the appropriate emission factor from AP-42 Table 1.4-1 (revised 7/98). Therefore, no hourly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

The tons/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be shown.

[OAC rule 3745-77-07(C)(1) and PTI #P0116807]

b. Emission Limitations:

1.24 pounds CO/hour, 5.43 tons CO/year

Applicable Compliance Method:

The hourly CO limitation represents the emissions unit's potential to emit based on a maximum heat input of 15 million BTU/hour, a heating value of 1020 btu/scf and the appropriate emission factor from AP-42 Table 1.4-1 (revised 7/98). Therefore, no hourly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

The tons/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be shown.

[OAC rule 3745-77-07(C)(1) and PTI #P0116807]

c. Emission Limitations:

0.16 pound OC/hour, 0.70 ton OC/year

Applicable Compliance Method:

The hourly OC limitation represents the emissions unit's potential to emit based on a maximum heat input of 15 million BTU/hour, a heating value of 1020 btu/scf and the appropriate emission factor from AP-42 Table 1.4-1 (revised 7/98). Therefore, no hourly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1-4 and 18, 25 or 25A (as applicable), of 40 CFR Part 60, Appendix A.

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be shown.

[OAC rule 3745-77-07(C)(1) and PTI #P0116807]

g) Miscellaneous Requirements

(1) None.

3. P005, Cracker Line 5

Operations, Property and/or Equipment Description:

Commercial bakery production line (Cracker Line No 5) with direct-fired oven

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) d)(8) through d)(11) and e)(2).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) [PTI #P0114882 issued on 6/10/13]	<u>Emissions from baking</u>: Controlled: 0.86 pounds organic compounds (OC)/hour, 3.77 tons OC/year Uncontrolled: 5.71 pounds OC/hour, 25.01 tons OC/year See b)(2)a., b)(2)d., and c)(1). <u>Emissions from combustion:</u> 1.14 pounds nitrogen oxides (NOx)/hour, 4.99 tons NOx/year 0.96 pounds carbon monoxide (CO)/hour, 4.20 tons CO/year See b)(2)c. and b)(2)d.
b.	OAC rule 3745-17-11(B)(1)	See b)(2)f.
c.	OAC rule 3745-17-07(A)	See b)(2)g.
d.	ORC 3704.03(F), and OAC rule 3745-114-01	See d)(8) through d)(11) and e)(2).
e.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM).	See d)(1) through d)(7) and e)(1).

(2) Additional Terms and Conditions

a. The BAT requirements under OAC rule 3745-31-05(A)(3) have been determined to be the use of catalytic oxidation* with an overall control efficiency of at least

95% by weight for control of OC emission and compliance with the terms and conditions of this permit**.

b. The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Huron County, which is identified as a P-3 county.

c. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

d. All OCs are assumed to be VOCs.

*When initially installed, this emissions unit was controlled by regenerative thermal oxidation (RTO). The permittee has proposed to replace the existing RTOs with a catalytic oxidizer while maintaining the same destruction efficiency that was previously established. The Ohio EPA considers the use of catalytic oxidation as an equivalent form of control.

**In addition, the BAT requirements established under OAC rule 3745-31-05(A)(3) for this emissions unit have been determined to be legally and practically enforceable, which is based on the emission limitations specified in section b)(1) in conjunction with the use of collection and control equipment as specified in section c).

c) Operational Restrictions

(1) The following operational restrictions are being established for purposes of establishing practically enforceable requirements:

a. The permittee shall install, operate, and maintain a catalytic oxidation control system for the purpose of controlling OC emissions from this emissions unit. The catalytic oxidation control system shall reduce OC emissions from the bakery oven by at least ninety-five per cent by weight (i.e., an overall control efficiency of at least 95% by weight). For purposes of meeting the ninety-five per cent by weight overall control efficiency, the permittee has indicated that the OC emission control system will achieve a 100% capture efficiency for emissions from the bakery oven which will be reduced by at least ninety-five per cent by catalytic oxidation.

b. The oven shall be constructed and maintained in such a manner as to have a totally enclosedbaking chamber, such that all volatile organic compound emissions are captured, contained, and directed to the oxidation control system (100% capture efficiency).

c. The ovenshall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.013 mm Hg (0.007 in. H2O), whenever the emissions unit is in operation.

[OAC rule 3745-77-07(C)(1) and PTI #P0114882]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain continuous temperature monitors and recorder(s) that measure and record(s) the temperature immediately upstream and downstream of the oxidizer's catalyst bed when the emissions unit is in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. 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 monitors 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 and the average temperature difference across the catalyst bed shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate valuesare established to demonstrate compliance.Following compliance testing, the permittee shall collect and record the following information each day the emissions unit is in operation:

a. all 3-hour blocks of time, when the emissions unit controlled by the catalytic oxidizer was in operation, during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was compliance;

b. all 3-hour blocks of time, when the emissions unit controlled by the catalytic oxidizer was in operation, during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference measured during the most recent performance test that demonstrated the emissions unit was in compliance; and

c. a log or record of (i) the downtime of the control equipment, (ii) any operational problems and/or malfunctions which reduce the effective control efficiency of the oxidizer, and (iii) the average control efficiency of the oxidizer, if less than the normally expected control efficiency.

These records shall be maintained at the facility for a period of not less than two years.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114882]

(2) The permittee shallinstall, operate, and maintain monitoring devices and a recorder that continuously monitor and record the differential pressure between the inside and outside of the oven when the emissions unit is in operation. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day:

a. all three-hour blocks of time during which the difference in pressure between the oven and the surrounding areas is not maintained at or above the minimum pressure differential of 0.007 inches of water, as a three-hour average; and

b. a log or record of downtime for the capture (collection) system when the emissions unit was in operation.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114882]

(3) Whenever the monitored average temperature of the exhaust gases immediately before the catalyst bed, the average temperature difference across the catalyst bed, or thedifferential pressure between the inside and outside of the oven 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(s)/limit(s) specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the temperature of the exhaust gases immediately before the catalyst and the average temperature difference across the catalyst bed,or the differential pressure between the inside and outside of the oven immediately after the corrective action was implemented;and

k. the name(s) of the personnel who performed the work.

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

The temperature ranges and differential pressure are 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 range(s) based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) of the controlled pollutant(s). In addition, approved revisions to the range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114882]

(4) The permittee shall measure, document/calculate, and maintain a permanent record of the following information for theoven, which may be the same record documented during the compliance test(s):

a. the measured diameter of each natural draft opening;

b. the distance measured from each natural draft opening to each OC emitting point;

c. the total calculated surface area of all natural draft openings and the surface area of the enclosures, four walls, floor, and ceiling;

d. the calculation or demonstration that the distance from each OC emitting point to each natural draft opening is at least 4 times the diameter of the opening; and

e. the calculation demonstrating that the sum of the surface areas of all of the natural draft openings to the enclosure is not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114883]

(5) The CAM plan for this emissions unit has been developed for volatile organic compounds. The CAM performance indicators for the catalytic oxidizer controlling this emissions unit are the combustion temperature and pressure differential, which were established in accordance with the manufacturer's recommendations. When the combustion temperature or pressure differential shows operation outside the indicator range(s), the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the appropriate Ohio EPA District Office or local air agency, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(8) The PTIapplication for this emissions unit, P005, 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 x 8/X x 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: Acetaldehyde

TLV (mg/m3): 25 ppm, 45,059 ug/m3

Maximum Hourly Emission Rate (lbs/hr): 0.78 lb/hour*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 362ug/m3

MAGLC (ug/m3): 791 ug/m3

*Modeling was conducted on the combined emissions of P001, P005, P006, and P011.

The permittee, has demonstrated that emissions of acetaldehyde from emissions unit P005 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).

[PTI #P0114882]

(9) 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 PTI 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.

[PTI #P0114882]

(10) 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.

[PTI #P0114882]

(11) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[PTI #P0114882]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. all 3-hour blocks of time, when the emissions unit was in operation, during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was compliance;

b. all 3-hour blocks of time, when the emissions unit was in operation, during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference measured during the most recent performance test that demonstrated the emissions unit was in compliance;

c. all three-hour blocks of time when the emissions unit was in operation, during which the bakery oven was not maintained at the minimum pressure differential of 0.007 inches of water;

d. any records of downtime (date and length of time) for the capture (collection) system, downtime or bypass of the monitoring equipment when the bakery oven was in operation; and

e. each incident of deviation described in e(1)a.- e(1)c. where:

i. a prompt investigation was not conducted;

ii. prompt corrective action, that would bring the emissions unit into compliance and/or the temperature into compliance with the acceptable range/limit, was determined to be necessary and was not taken;or

iii. proper records were not maintained for the investigation and/or the corrective action(s).

If no deviations (excursions) occurred during a calendar quarter, thepermittee 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).

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114882]

(2) The permittee shall submit annual reports that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the “Toxic Air

Contaminate Statute", ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:

a. the original model input;

b. the updated model input;

c. the reason for the change(s) to the input parameter(s); and

d. a summary of the results of the updated modeling, including the input changes; and

e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[PTI #P0114882]

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 in accordance with the time frame established in PTI #P0114882.

b. The emission testing shall be conducted to demonstrate compliance with the hourly OC limitation, the 95% OC control efficiency and the 75% OC capture efficiency.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for VOC, Methods 1-4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the control efficiency for OC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The captureefficiency 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.) The controlefficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A and Methods 204

through 204F, as specified in 40 CFR Part 51, Appendix M. 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."

e. The test(s) shall be conducted while the emissions unit is operating under "worst case" conditions, which will be approved by the appropriate Ohio EPA District Office or local air agency. The "Intent to Test", as specified below, may serve as the permittee's proposed testing scenario(s).

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).

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.

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.

[OAC rule 3745-77-07(C)(1)and PTI #P0114882]

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

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

Controlled: 0.86 pounds OC/hour, 3.77 tons OC/year

Uncontrolled: 5.71 pounds OC per hour and 25.01 tons OC per year

<u>Applicable Compliance Method:</u>
Compliance with the controlled pound per hour emission limitation shall be determined in accordance with the test methods and procedures specified in f)(1).

The uncontrolled pound per hour emission limitation was calculated by multiplying the maximum production rate of 0.99 tons/hr by the permittee supplied emission factor of 23.08 lbs OC/ton of product, and by factoring out the emissions being captured at the oven [75%, which is represented as (1.0-0.75)]. If required, the permittee shall demonstrate compliance with the hourly emission limitation in accordance with accordance with the test methods and procedures of 40 CFR Part 60, Appendix A, Methods 1-4, and 18, 25 or 25A as applicable and Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M.

The annual emission limitations represent the potential to emit and were developed by multiplying the hourly emission rates by 8760 hours per year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitations, compliance with the annual emission limitations shall also be demonstrated.

b. Emission Limitations:
1.14 pounds NOx per hour, 4.99 tons NOx per year

Applicable Compliance Method:
The hourly emission limitation represents the potential to emit* for this emissions unit. Therefore no monitoring, record keeping, or reporting requirements are required to demonstrate compliance with this limitation.

*The potential to emit for this emissions unit is based on the unit's maximum heat input of 12.0 mmBtu/hour multiplied by the emission factor 0.1 pound NOx/mmBtu from AP-42 Table 1.4-1 (revised 3/98).

If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1 - 4, and 7 of 40 CFR Part 60, Appendix A.

The annual emission limitation represents the potential to emit and was developed by multiplying the hourly emission rate by 8760 hours per year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

c. Emission Limitations:
0.96 pound CO per hour, 4.20 tons CO per year

Applicable Compliance Method:
The hourly emission limitation represents the potential to emit* for this emissions unit. Therefore no monitoring, record keeping, or reporting requirements are required to demonstrate compliance with this limitation.

*The potential to emit for this emissions unit is based on the unit's maximum heat input of 12.0 mmBtu/hour multiplied by the emission factor 0.08 pound CO/mmBtu from AP-42 Table 1.4-1 (revised 3/98).

If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A.

The annual emission limitation represents the potential to emit and was developed by multiplying the hourly emission rate by 8760 hours per year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0114883]

g) Miscellaneous Requirements

(1) This emissions unit does not include the processing of dough prior to loading onto the cracker line.

4. P006, Cracker Line 6

Operations, Property and/or Equipment Description:

Commercial bakery production line (Cracker Line No 6) with direct-fired oven

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) d)(8) through d)(11) and e)(2).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) [PTI #P0114883 issued on 6/10/13]	Emissions from baking: Controlled: 1.62 pounds organic compounds (OC)/hour, 7.12 tons OC/year Uncontrolled: 10.83 pounds OC/hour, 47.45 tons OC/year See b)(2)a., b)(2)h., and c)(1).
b.	ORC 3704.03(T)	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Emissions from combustion: 1.11 pounds nitrogen oxides (NOx)/hour, 4.9 tons NOx/year 0.93 pounds carbon monoxide (CO)/hour, 4.1 tons CO/year See b)(2)c. and b)(2)d.
d.	OAC rule 3745-31-05(A)(3), as effective 12/1/06	See b)(2)e.
e.	OAC rule 3745-17-11(B)(1)	See b)(2)f.
f.	OAC rule 3745-17-07(A)	See b)(2)g.
g.	ORC 3704.03(F), and OAC rule 3745-114-01	See d)(8) through d)(11) and e)(2).
h.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7) and e)(1).

(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). The federally enforceable emission limitations are based on the operational restrictions contained in c)(1) which require emissions control:

i. Controlled: 1.62 pounds OC per hour and 7.12 tons OC per year;

ii. Uncontrolled: 10.83 pounds OC per hour and 47.45 tons OC per year.

b. This air contaminant source has the potential to emit, taking into account air pollution controls installed on the source, of ten or more tons per year of volatile organic compounds (VOC), and as such, shall meet the requirements of ORC 3704.03(T). The Best Available Technology (BAT) requirements established under ORC 3704.03(T) have been determined to be the compliance with the mass emission limitations and operational restrictions established under OAC rule 3745-31-05(D).

c. The BAT requirements under OAC rule 3745-31-05(A)(3), effective 11/30/01 have been determined to be the following:

i. use of catalytic oxidation for control of OC emission [see c)(1)]:

ii. 1.11 pounds NOx per hour and 4.9 tons NOx per year;

iii. 0.93 pound CO per hour and 4.1 tons CO per year;

iv. compliance with the requirements established under OAC rule 3745-31-05(D).

- When initially installed, this emissions unit was controlled by regenerative thermal oxidation (RTO). The permittee has proposed to replace the existing RTOs with a catalytic oxidizer while maintaining the same destruction efficiency that was previously established. The Ohio EPA considers the use of catalytic oxidation as an equivalent form of control.

d. The permittee satisfied the BAT requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by 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 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.

e. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of the OAC rule 3745-31-05 as part of the State Implementation Plan. The BAT requirements under OAC rule 3745-31-05(A)(3)(a), effective December 1, 2006 do not apply to the emissions of carbon monoxide (CO) and nitrogen oxides (NOx) from this emissions unit since the uncontrolled potential to emit for CO and NOx is less than 10 tons per year.

It should be noted that this air contaminant source has emissions of sulfur dioxide (SO2) and particulate matter 10 microns or less in size (PM10) which are associated with the combustion of natural gas. The potential emissions of SO2 and PM10 are negligible and therefore have not been addressed within this permit.

f. The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Huron County, which is identified as a P-3 county.

g. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

h. All OCs are assumed to be VOCs.

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.]:

a. The permittee shall install, operate, and maintain a catalytic oxidation control system for the purpose of controlling OC emissions from this emissions unit. The catalytic oxidation control system shall reduce OC emissions from the bakery oven by at least ninety-five per cent by weight (i.e., an overall control efficiency of at least 95% by weight). For purposes of meeting the ninety-five per cent by weight overall control efficiency, the permittee has indicated that the OC emission control system will achieve a 100% capture efficiency for emissions from the bakery oven which will be reduced by at least ninety-five per cent by catalytic oxidation.

b. The oven shall be constructed and maintained in such a manner as to have a totally enclosedbaking chamber, such that all volatile organic compound emissions are captured, contained, and directed to the oxidation control system (100% capture efficiency).

c. The ovenshall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.013 mm Hg (0.007 in. H2O), whenever the emissions unit is in operation.

[OAC rule 3745-77-07(C)(1) and PTI #P0114883]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain continuous temperature monitors and recorder(s) that measure and record(s) the temperature immediately upstream and downstream of the oxidizer's catalyst bed when the emissions unit is in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. 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 monitors 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 and the average temperature difference across the catalyst bed shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate valuesare established to demonstrate compliance.Following compliance testing, the permittee shall collect and record the following information each day the emissions unit is in operation:

a. all 3-hour blocks of time, when the emissions unit controlled by the catalytic oxidizer was in operation, during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was compliance;

b. all 3-hour blocks of time, when the emissions unit controlled by the catalytic oxidizer was in operation, during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference measured during the most recent performance test that demonstrated the emissions unit was in compliance; and

c. a log or record of (i) the downtime of the control equipment, (ii) any operational problems and/or malfunctions which reduce the effective control efficiency of the oxidizer, and (iii) the average control efficiency of the oxidizer, if less than the normally expected control efficiency.

These records shall be maintained at the facility for a period of not less than two years.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114883]

(2) The permittee shallinstall, operate, and maintain monitoring devices and a recorder that continuously monitor and record the differential pressure between the inside and outside of the oven when the emissions unit is in operation. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the

manufacturer's recommendations, instructions, and operating manuals, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day:

a. all three-hour blocks of time during which the difference in pressure between the oven and the surrounding areas is not maintained at or above the minimum pressure differential of 0.007 inches of water, as a three-hour average; and

b. a log or record of downtime for the capture (collection) system when the emissions unit was in operation.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114883]

(3) Whenever the monitored average temperature of the exhaust gases immediately before the catalyst bed, the average temperature difference across the catalyst bed, or thedifferential pressure between the inside and outside of the oven 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(s)/limit(s) specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the temperature of the exhaust gases immediately before the catalyst and the average temperature difference across the catalyst bed,or the differential pressure between the inside and outside of the oven immediately after the corrective action was implemented;and

k. the name(s) of the personnel who performed the work.

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

The temperature ranges and differential pressure are 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 range(s) based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) of the controlled pollutant(s). In addition, approved revisions to the range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114883]

(4) The permittee shall measure, document/calculate, and maintain a permanent record of the following information for theoven, which may be the same record documented during the compliance test(s):

a. the measured diameter of each natural draft opening;

b. the distance measured from each natural draft opening to each OC emitting point;

c. the total calculated surface area of all natural draft openings and the surface area of the enclosures, four walls, floor, and ceiling;

d. the calculation or demonstration that the distance from each OC emitting point to each natural draft opening is at least 4 times the diameter of the opening; and

e. the calculation demonstrating that the sum of the surface areas of all of the natural draft openings to the enclosure is not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114883]

(5) The CAM plan for this emissions unit has been developed for volatile organic compounds. The CAM performance indicators for the catalytic oxidizer controlling this emissions unit are the combustion temperature and pressure differential, which were established in accordance with the manufacturer's recommendations. When the combustion temperature or pressure differential shows operation outside the indicator range(s), the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the appropriate Ohio EPA District Office or local air agency, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(8) The PTIapplication for this emissions unit, P001, 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 x 8/X x 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: Acetaldehyde

TLV (mg/m3): 25 ppm, 45,059 ug/m3

Maximum Hourly Emission Rate (lbs/hr): 0.78 lb/hour*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 362ug/m3

MAGLC (ug/m3): 791 ug/m3

*Modeling was conducted on the combined emissions of P001, P005, P006, and P011.

The permittee, has demonstrated that emissions of acetaldehyde from emissions unit P006 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).

[PTI #P0114883]

(9) 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 PTI 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.

[PTI #P0114883]

(10) 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.

[PTI #P0114883]

(11) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[PTI #P0114883]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. all 3-hour blocks of time, when the emissions unit was in operation, during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was compliance;

b. all 3-hour blocks of time, when the emissions unit was in operation, during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference measured during the most recent performance test that demonstrated the emissions unit was in compliance;

c. all three-hour blocks of time when the emissions unit was in operation, during which the bakery oven was not maintained at the minimum pressure differential of 0.007 inches of water;

d. any records of downtime (date and length of time) for the capture (collection) system, downtime or bypass of the monitoring equipment when the bakery oven was in operation; and

e. each incident of deviation described in e(1)a.- e(1)c. where:

i. a prompt investigation was not conducted;

ii. prompt corrective action, that would bring the emissions unit into compliance and/or the temperature into compliance with the acceptable range/limit, was determined to be necessary and was not taken;or

iii. proper records were not maintained for the investigation and/or the corrective action(s).

If no deviations (excursions) occurred during a calendar quarter, thepermittee 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).

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI #P0114883]

(2) The permittee shall submit annual reports that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the “Toxic Air

Contaminate Statute", ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:

a. the original model input;

b. the updated model input;

c. the reason for the change(s) to the input parameter(s); and

d. a summary of the results of the updated modeling, including the input changes; and

e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[PTI #P0114883]

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 in accordance with the time frame established in PTI #P0114883.

b. The emission testing shall be conducted to demonstrate compliance with the hourly OC limitation, the 95% OC control efficiency and the 75% OC capture efficiency.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for VOC, Methods 1-4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the control efficiency for OC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The captureefficiency 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.) The controlefficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A and Methods 204

through 204F, as specified in 40 CFR Part 51, Appendix M. 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."

e. The test(s) shall be conducted while the emissions unit is operating under "worst case" conditions, which will be approved by the appropriate Ohio EPA District Office or local air agency. The "Intent to Test", as specified below, may serve as the permittee's proposed testing scenario(s).

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).

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.

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.

[OAC rule 3745-77-07(C)(1)and PTI #P0114883]

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

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

Controlled: 1.62 pounds OC per hour and 7.12 tons OC per year

Uncontrolled: 10.83 pounds OC per hour and 47.45 tons OC per year

<u>Applicable Compliance Method:</u>
Compliance with the controlled pound per hour emission limitation shall be determined in accordance with the test methods and procedures specified in f)(1).

The uncontrolled pound per hour emission limitation was calculated by multiplying the maximum production rate of 1.8774 tons/hr by the permittee supplied emission factor of 23.08 lbs OC/ton of product, and by factoring out the emissions being captured at the oven [75%, which is represented as (1.0-0.75)]. If required, the permittee shall demonstrate compliance with the hourly emission limitation in accordance with accordance with the test methods and procedures of 40 CFR Part 60, Appendix A, Methods 1-4, and 18, 25 or 25A as applicable and Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M.

The annual emission limitations represent the potential to emit and were developed by multiplying the hourly emission rate by 8760 hours per year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitations, compliance with the annual emission limitations shall also be demonstrated.

b. Emission Limitations:
1.11 pounds NOx per hour, 4.9 tons NOx per year

Applicable Compliance Method:
The hourly emission limitation represents the potential to emit* for this emissions unit. Therefore no monitoring, record keeping, or reporting requirements are required to demonstrate compliance with this limitation.

*The potential to emit for this emissions unit is based on the unit's maximum heat input of 11.33 mmBtu/hour multiplied by the emission factor 0.1 pound NOx/mmBtu from AP-42 Table 1.4-1 (revised 3/98).

If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1 - 4, and 7 of 40 CFR Part 60, Appendix A.

The annual emission limitation represents the potential to emit and was developed by multiplying the hourly emission rate by 8760 hours per year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

c. Emission Limitations:
0.93 pound CO per hour, 4.1 tons CO per year

Applicable Compliance Method:
The hourly emission limitation represents the potential to emit* for this emissions unit. Therefore no monitoring, record keeping, or reporting requirements are required to demonstrate compliance with this limitation.

*The potential to emit for this emissions unit is based on the unit's maximum heat input of 11.33 mmBtu/hour multiplied by the emission factor 0.08 pound CO/mmBtu from AP-42 Table 1.4-1 (revised 3/98).

If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A.

The annual emission limitation represents the potential to emit and was developed by multiplying the hourly emission rate by 8760 hours per year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0114883]

g) Miscellaneous Requirements

(1) This emissions unit does not include the processing of dough prior to loading onto the cracker line.

5. Emissions Unit Group -A: P004,P007,P008,

EU ID	Operations, Property and/or Equipment Description
P004	12 million Btu/hour natural gas- (or LPG backup) fired bake oven for biscuit line number 1 (unleavened products)
P007	12 million Btu/hour natural gas- (or LPG backup) fired bake oven for biscuit line number 3 (unleavened products)
P008	12 million Btu/hour natural gas- (or LPG backup) fired bake oven for biscuit line number 2 (unleavened products)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) [PTI #P0116807, issued on 05/09/14]	<u>OC emissions from baking</u>: none <u>emissions from combustion, from each emissions unit individually</u>: 1.18 pounds nitrogen oxides (NOx)/hour, 5.17 tons NOx/year 0.99 pound carbon monoxides (CO)/hour, 4.34 tons CO/year 0.13 pound organic compounds (OC)/hour), 0.57 ton OC/year
b.	OAC rule 3745-17-11(B)(1)	None [See b)(2)a.]
c.	OAC rule 3745-17-07(A)	None [See b)(2)b.]

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition,

Table I of OAC rule 3745-17-11 does not apply since the facility is located in Huron County, which is identified as a P-3 county.

b. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

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

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

1.18 pounds NOx/hour, 5.17 tons NOx/year

<u>Applicable Compliance Method:</u>

The hourly NOx limitation represents the emissions unit's potential to emit based on a maximum heat input of 12 million BTU/hour, a heating value of 1020 btu/scf and the appropriate emission factor from AP-42 Table 1.4-1 (revised 7/98). Therefore, no hourly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

The tons/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be shown.

[OAC rule 3745-77-07(C)(1) and PTI #P0116807]

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

0.99 pound CO/hour, 4.34 tons CO/year

Applicable Compliance Method:

The hourly CO limitation represents the emissions unit's potential to emit based on a maximum heat input of 12 million BTU/hour, a heating value of 1020 btu/scf and the appropriate emission factor from AP-42 Table 1.4-1 (revised 7/98). Therefore, no hourly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

The tons/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be shown.

[OAC rule 3745-77-07(C)(1) and PTI #P0116807]

c. Emission Limitations:

0.13 pound OC/hour, 0.57 ton OC/year

Applicable Compliance Method:

The hourly OC limitation represents the emissions unit's potential to emit based on a maximum heat input of 12 million BTU/hour, a heating value of 1020 btu/scf and the appropriate emission factor from AP-42 Table 1.4-1 (revised 7/98). Therefore, no hourly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

If required, the permittee shall demonstrate compliance with the hourly emission limitation by testing in accordance with Methods 1-4 and 18, 25 or 25A (as applicable), of 40 CFR Part 60, Appendix A.

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be shown.

[OAC rule 3745-77-07(C)(1) and PTI #P0116807]

g) Miscellaneous Requirement

(1) None.