INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: July 13, 2006

RE: Allen Foods Inc. / 039-22633-00643

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 03/23/06

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

NEW SOURCE REVIEW AND FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

Allen Foods, Inc.
53075 Frederic Drive,
Elkhart, Indiana 46514

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provision of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. 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 conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-8-11.1, applicable to those conditions.

Operation Permit No.: F039-22633-00643	
Issued by: Original signed by Nisha Sizemore, Branch Chief Office of Air Quality	Issuance Date: July 13, 2006 Expiration Date: July 13, 2011

SECTION A SOURCE SUMMARY 5
A.1 General Information [326 IAC 2-8-3(b)]
A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
A.3 FESOP Applicability [326 IAC 2-8-2]

SECTION B GENERAL CONDITIONS 7
B.1 Definitions [326 IAC 2-8-1]
B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]
B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4] [326 IAC 2-8]
B.4 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5] [IC 13-15-3-6(a)]
B.5 Term of Conditions [326 IAC 2-1.1-9.5]
B.6 Enforceability [326 IAC 2-8-6]
B.7 Severability [326 IAC 2-8-4(4)]
B.8 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]
B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]
B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]
B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]
B.14 Emergency Provisions [326 IAC 2-8-12]
B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]
B.16 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]
B.17 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
B.18 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]
B.19 Permit Renewal [326 IAC 2-8-3(h)]
B.20 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]
B.21 Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]
B.22 Source Modification Requirement [326 IAC 2-8-11.1]
B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC13-14-2-2] [IC 13-17-3-2] [IC13-30-3-1]
B.24 Transfer of Ownership or Operational Control [326 IAC 2-8-10]
B.25 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] [326 IAC 2-1.1-7]
B.26 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314] [326 IAC 1-1-6]

SECTION C SOURCE OPERATION CONDITIONS 17

Emission Limitations and Standards [326 IAC 2-8-4(1)]
C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]
C.2 Overall Source Limit [326 IAC 2-8] [326 IAC 2-2] [326 IAC 2-3]
C.3 Opacity [326 IAC 5-1]
C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]
C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
C.6 Fugitive Dust Emissions [326 IAC 6-4]
C.7 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]
C.8 Stack Height [326 IAC 1-7]
C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61 Subpart M]

Testing Requirements [326 IAC 2-8-4(3)]
C.10 Performance Testing [326 IAC 3-6]

Compliance Requirements [326 IAC 2-1.1-11]
C.11 Compliance Requirements [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]
C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
C.14 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]
C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]
C.17 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]
C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]
C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]
C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection
C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 FACILITY OPERATION CONDITIONS - Dry Ingredient Storage and Conveying 25

General Construction Conditions

D.1.1 Permit No Defense

Effective Date of the Permit

D.1.2 Effective Date of the Permit [IC13-15-5-3]
D.1.3 Modification to Construction Conditions [326 IAC 2]

Operation Conditions

Emission Limitations and Standards [326 IAC 2-8-4(1)]
D.1.4 Particulate [326 IAC 6-3-2]
D.1.5 Particulate Emission Limitations [326 IAC 2-8-4] [326 IAC 2-2]
D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements
D.1.7 Particulate Control

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]
D.1.8 Visible Emissions Notations
D.1.9 Parametric Monitoring
D.1.10 Broken or Failed Filter Detection

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]
D.1.11 Record Keeping Requirements
D.1.12 Reporting Requirements

SECTION D.2 FACILITY OPERATION CONDITIONS - Bread and Muffin Ovens 29

General Construction Conditions

D.2.1 Permit No Defense

Effective Date of the Permit

D.2.2 Effective Date of the Permit [IC13-15-5-3]
D.2.3 Modification to Construction Conditions [326 IAC 2]

Operation Conditions

Emission Limitations and Standards [326 IAC 2-8-4(1)]
D.2.4 New Facilities, General Reduction Requirements [326 IAC 8-1-6] [326 IAC 2-8-4] [326 IAC 2-3]
D.2.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements
D.2.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 2-8-4] [326 IAC 2-3]
D.2.7 Testing Requirements [326 IAC 3-6] [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]
D.2.8 Catalytic Oxidizer Temperature
D.2.9 Parametric Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]
D.2.10 Record Keeping Requirements

SECTION D.3 FACILITY OPERATION CONDITIONS - Indirect Heating Units 32

General Construction Conditions

D.3.1 Permit No Defense

Effective Date of the Permit

D.3.2 Effective Date of the Permit [IC13-15-5-3]
D.3.3 Modification to Construction Conditions [326 IAC 2]

Operation Conditions

Emission Limitations and Standards [326 IAC 2-8-4(1)]
D.3.4 Particulate [326 IAC 6-2-4]

Certification Form 33
Emergency Occurrence Form 34
Quarterly Report Form 36
Quarterly Report Form 37
Quarterly Report Form 38
Quarterly Deviation and Compliance Monitoring Report Form 39
Affidavit of Construction 41
Attachment A: Fugitive Dust Control Plan 42

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary commercial bakery.

Authorized Individual:	Larry Valentine
Source Address:	53075 Frederic Drive, Elkhart, IN 46514
Mailing Address:	53075 Frederic Drive, Elkhart, IN 46514
General Source Phone Number:	(574) 612-0574 or (574) 266-7240
SIC Code:	2051 (Manufacturing of Bread and Other Bakery Products, Except Cookies and Crackers)
County Location:	Elkhart
Source Location Status:	Nonattainment area for ozone under the 8-hour standard Attainment area for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not in 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) one (1) dry ingredient storage and conveyance system, to be installed in 2006, including, but not limited to, pneumatic conveyance process equipment and piping, storage silos, use bins, weigh scale hoppers, ingredient mixers, transfer equipment, other process equipment and piping, and associated pollution control equipment, with a maximum capacity of 14,310 pounds of dry ingredients per hour. The pneumatic conveyance system includes the following emission units:

(1) two (2) dry ingredient storage silos, identified as emission units 021 and 022, to be installed in 2006, each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(2) five (5) dry ingredient storage silos, identified as emission units 030 through 034, to be installed in 2006, each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(3) two (2) dry ingredient use bins, identified as emission units 035 and 036, to be installed in 2006, each with a maximum storage capacity of 2,000 pounds of dry ingredients, and each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(4) one (1) dusting flour use bin, identified as emission unit 037, to be installed in 2006, with a maximum storage capacity of 2,000 pounds of dusting flour, and equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(5) four (4) muffin scale hoppers, identified as emission units 038 through 041, to be installed in 2006, each with a maximum storage capacity of 800 pounds of dry ingredients, and each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(6) three (3) bread scale hoppers, identified as emission units 042 through 044, to be installed in 2006, each with a maximum storage capacity of 1,600 pounds of dry ingredients, and each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(6) two (2) dusting flour hoppers, identified as emission units 045 and 046, to be installed in 2006, each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(b) one (1) english muffin oven, identified as emission unit 001, to be installed in 2006, rated at 2.85 MMBtu per hour, with a process rate of 504 pieces per minute, exhausting through seven (7) vents (S01 through S07);

(c) one (1) english muffin oven, identified as emission unit 027, to be installed in 2006, rated at 2.40 MMBtu per hour, with a process rate of 504 pieces per minute, exhausting through seven (7) vents (S08 through S14);

(d) one (1) bread oven, identified as emission unit 028, to be installed in 2006, rated at 10.08 MMBtu per hour, with a process rate of 160 loaves per minute, with volatile organic emissions controlled by one (1) natural gas-fired catalytic oxidizer, identified as emission unit 029, rated at 3.0 MMBtu/hr, with a minimum operating temperature of 600°F, exhausting through one (1) vent (S17); and

(e) one (1) auxiliary boiler, burning natural gas, identified as emission unit 002, to be installed in 2006, rated at 1 MMBtu per hour;

(f) one (1) process hot water heater, burning natural gas, identified as emission unit 003, to be installed in 2006, rated at 0.54 MMBtu per hour;

(g) one (1) domestic hot water heater, burning natural gas, identified as emission unit 004, to be installed in 2006, rated at 0.3 MMBtu per hour;

(h) five (5) space heaters, burning natural gas, identified as emission units 005 through 009, to be installed in 2006, each rated at 3.5 MMBtu per hour;

(i) eleven (11) space heaters, burning natural gas, identified as emission units 010 through 020, to be installed in 2006, each rated at 0.12 MMBtu per hour; and

A.3 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5) (Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4] [326 IAC 2-8]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 when prior to the start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.

(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

B.4 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5] [IC 13-15-3-6(a)]

(a) This permit, F039-22633-00643, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.5 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.6 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.7 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.8 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document

is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877.

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to F039-22633-00643 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.16 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.17 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.18 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.19 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.20 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.21 Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.22 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-17-3-2] [IC13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.24 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.25 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.26 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8] [326 IAC 2-2] [326 IAC 2-3]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable;

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) The potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on April 5, 2006. The plan is included as Attachment A.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [**326 IAC 2-8-4(3)]**

C.10 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum capacity, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.14 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

within 180 days from the date on which this source commences operation.

The ERP does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.17 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records;

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction.

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)] - Dry Ingredient Storage and Conveying

(a) one (1) dry ingredient storage and conveyance system, to be installed in 2006, including, but not limited to, pneumatic conveyance process equipment and piping, storage silos, use bins, weigh scale hoppers, ingredient mixers, transfer equipment, other process equipment and piping, and associated pollution control equipment, with a maximum capacity of 14,310 pounds of dry ingredients per hour. The pneumatic conveyance system includes the following emission units:

(1) two (2) dry ingredient storage silos, identified as emission units 021 and 022, to be installed in 2006, each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(2) five (5) dry ingredient storage silos, identified as emission units 030 through 034, to be installed in 2006, each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(3) two (2) dry ingredient use bins, identified as emission units 035 and 036, to be installed in 2006, each with a maximum storage capacity of 2,000 pounds of dry ingredients, and each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(4) one (1) dusting flour use bin, identified as emission unit 037, to be installed in 2006, with a maximum storage capacity of 2,000 pounds of dusting flour, and equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(5) four (4) muffin scale hoppers, identified as emission units 038 through 041, to be installed in 2006, each with a maximum storage capacity of 800 pounds of dry ingredients, and each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(6) three (3) bread scale hoppers, identified as emission units 042 through 044, to be installed in 2006, each with a maximum storage capacity of 1,600 pounds of dry ingredients, and each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(7) two (2) dusting flour hoppers, identified as emission units 045 and 046, to be installed in 2006, each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

General Construction Conditions

D.1.1 Permit No Defense

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13 17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

D.1.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.1.3 Modification to Construction Conditions [326 IAC 2]

All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.4 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), the particulate emissions from each of the following dry ingredient storage and conveying emission units shall not exceed the allowable PM emission rate as listed in the table below:

Emission Unit Type	Maximum Process Weight Rate (tons/hr)	326 IAC 6-3-2 Allowable PM Emission Rate (lbs/hr)
Each Dry Ingredient Storage Silo	16.68	27.0
Each Dry Ingredient Use Bin	9.75	18.9
Dusting Flour Use Bin	9.75	18.9
Each Muffin Scale Hopper	7.50	15.8
Each Bread Scale Hopper	7.50	15.8

The pound per hour limitations were calculated with the following equation:

Interpolation of the data in the table in 326 IAC 6-3-2(e)(2) for the process weight rates up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and
P = process weight rate in tons per hour

D.1.5 Particulate Emission Limitations [326 IAC 2-8-4] [326 IAC 2-2]

Emissions of particulate matter (PM) and particulate matter with a diameter less than ten (10) micrometers (PM10) from the dry ingredient storage and conveying emission units shall be limited as follows:

Emission Unit Type	Total Dry Ingredient Throughput Limit (tons/12 months)*	PM Limit (lbs/ton)	PM10 Limit (lbs/ton)
7 Dry Ingredient Storage Silos (021, 022, 030, 031, 032, 033, and 034)	62,678	0.314	0.110
3 Use Bins (035, 036, and 037)	62,678	0.314	0.110
9 Hoppers (038, 039, 040, 041, 042, 043, 044, 045 and 046)	62,678	0.314	0.110

* Total dry ingredient throughput limit in tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits combined with the potential PM and PM10 emissions from all other emission units at this source will limit the source-wide total potential to emit of PM and PM10 to less than 250 and 100 tons per 12 consecutive month period, respectively, will satisfy 326 IAC 2-8-4 (FESOP), and will render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (PSD) not applicable.

D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the dry ingredient storage and conveying emission units and any control devices.

Compliance Determination Requirements

D.1.7 Particulate Control

(a) In order to comply with Conditions D.1.4 and D.1.5, particulate from each of the dry ingredient storage and conveying emission units shall be controlled by a filter unit at all times that each of the dry ingredient storage and conveying emission units is in operation.

(b) In the event that filter failure is observed in a multi-compartment filter unit, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [**326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

D.1.8 Visible Emissions Notations

(a) Visible emission notations of each of the filter unit stack exhausts associated with the dry ingredient storage and conveying emission units shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.9 Parametric Monitoring

The Permittee shall record the pressure drop across each of the filter units used in conjunction with each of the dry ingredient storage and conveying emission units, at least once per day when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the filter unit is outside the normal range of 1.0 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.10 Broken or Failed Filter Detection

(a) For a single compartment filter unit controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment filter unit controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the dry ingredient storage or conveying emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Filter failure can be indicated by a significant drop in the filter's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.11 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain monthly records of the total amount (in tons) of dry ingredient input to the seven (7) dry ingredient storage silos (021, 022, 030, 031, 032, 033, and 034).

(b) To document compliance with Condition D.1.5, the Permittee shall maintain monthly records of the total amount (in tons) of dry ingredient input to the three (3) use bins (035, 036, and 037).

(c) To document compliance with Condition D.1.5, the Permittee shall maintain monthly records of the total amount (in tons) of dry ingredient input to the nine (9) hoppers (038, 039, 040, 041, 042, 043, 044, 045 and 046).

(d) To document compliance with Condition D.1.8, the Permittee shall maintain records of visible emission notations of the filter unit stack exhaust once per day.

(e) To document compliance with Condition D.1.9, the Permittee shall maintain records once per day of the pressure drop during normal operation.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.5 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Bread and Muffin Ovens

(b) one (1) english muffin oven, identified as emission unit 001, to be installed in 2006, rated at 2.85 MMBtu per hour, with a process rate of 504 pieces per minute, exhausting through seven (7) vents (S01 through S07);

(c) one (1) english muffin oven, identified as emission unit 027, to be installed in 2006, rated at 2.40 MMBtu per hour, with a process rate of 504 pieces per minute, exhausting through seven (7) vents (S08 through S14);

(d) one (1) bread oven, identified as emission unit 028, to be installed in 2006, rated at 10.08 MMBtu per hour, with a process rate of 160 loaves per minute, with volatile organic emissions controlled by one (1) natural gas-fired catalytic oxidizer, identified as emission unit 029, rated at 3.0 MMBtu/hr, with a minimum operating temperature of 600°F, exhausting through one (1) vent (S17); and

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

General Construction Conditions

D.2.1 Permit No Defense

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13 17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

D.2.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.2.3 Modification to Construction Conditions [326 IAC 2]

All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.4 New Facilities, General Reduction Requirements [326 IAC 8-1-6] [326 IAC 2-8-4] [326 IAC 2-3]

Pursuant to 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), the Permittee shall control the VOC emissions from the bread oven (028) using the Best Available Control Technology (BACT), which has been determined to be the following:

(a) The VOC emissions from the bread oven (028) shall be controlled by a catalytic oxidizer.

(b) The overall VOC control efficiency for the catalytic oxidizer (including the capture efficiency and destruction efficiency) shall be at least 95%, or the VOC outlet concentration shall not exceed 10 ppmv.

(c) The VOC emissions from the bread oven (028) shall not exceed 2.29 pounds per hour.

Compliance with this limit combined with the potential VOC emissions from all other emission units at this source will limit the source-wide total potential to emit of VOCs to less than 100 tons per 12 consecutive month period, will satisfy 326 IAC 2-8-4 (FESOP), and will render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-3 (Emission Offset) not applicable.

D.2.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for the bread oven (028) and catalytic oxidizer.

Compliance Determination Requirements

D.2.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 2-8-4] [326 IAC 2-3]

In order to comply with Condition D.2.4, the catalytic oxidizer shall be in operation and control emissions from the bread oven at all times the bread oven is in operation.

D.2.7 Testing Requirements [326 IAC 3-6] [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.2.4, the Permittee shall perform VOC (including emission rate and overall control efficiency of the catalytic oxidizer) testing for the catalytic oxidizer, within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

(b) In order to verify the emission factor for acetaldehyde, the Permittee shall perform an initial one time performance test for the uncontrolled emissions of acetaldehyde from the bread oven and the controlled emissions of acetaldehyde from the catalytic oxidizer, within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner.

(c) Pursuant to Registration No. 039-21980-00643 and in order to verify the emission factor, the Permittee shall perform an initial one time performance test for the uncontrolled VOC emissions from the english muffin oven (001), within 60 days after achieving the maximum capacity rate but no later than 180 days after startup of the english muffin oven (001), utilizing methods as approved by the Commissioner.

Testing shall be conducted in accordance with Section C - Performance Testing.

D.2.8 Catalytic Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the catalytic oxidizer for measuring operating temperature. The output of this system shall be recorded continuously. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the catalytic oxidizer at or above a temperature of 600°F.

(b) The Permittee shall determine the average temperature from the most recent valid stack test that demonstrates compliance with Condition D.2.4, as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall operate the catalytic oxidizer at or above the average temperature as observed during the compliant stack test.

D.2.9 Parametric Monitoring

(a) The Permittee shall determine the appropriate duct pressure or fan amperage of the capture system for the catalytic oxidizer from the most recent valid stack test that demonstrates compliance with Condition D.2.4, as approved by IDEM.

(b) The duct pressure or fan amperage shall be observed at least once per day when the catalytic oxidizer is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.10 Record Keeping Requirements

(a) To document compliance with Conditions D.2.4, D.2.8, and D.2.9, the Permittee shall maintain records in accordance with (1) through (6) below for the catalytic oxidizer controlling the bread oven:

(1) The continuous temperature records for the catalytic oxidizer and the average temperature used to demonstrate compliance during the most recent compliant stack test.

(2) Daily records of the duct pressure or fan amperage of the capture system for the catalytic oxidizer.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Indirect Heating Units

(e) one (1) auxiliary boiler, burning natural gas, identified as emission unit 002, to be installed in 2006, rated at 1 MMBtu per hour;

(f) one (1) process hot water heater, burning natural gas, identified as emission unit 003, to be installed in 2006, rated at 0.54 MMBtu per hour;

(g) one (1) domestic hot water heater, burning natural gas, identified as emission unit 004, to be installed in 2006, rated at 0.3 MMBtu per hour;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

General Construction Conditions

D.3.1 Permit No Defense

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13 17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

D.3.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.3.3 Modification to Construction Conditions [326 IAC 2]

All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.4 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the particulate matter emissions from the auxiliary boiler, process hot water heater, and domestic hot water heater shall not exceed 0.6 pounds per million British thermal unit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Allen Foods, Inc.
Source Address: 53075 Frederic Drive, Elkhart, IN 46514
Mailing Address: 53075 Frederic Drive, Elkhart, IN 46514
FESOP No.: F039-22633-00643

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify) _____

☐ Notification (specify)_____

☐ Affidavit (specify) _____

☐ Other (specify)_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Allen Foods, Inc.
Source Address: 53075 Frederic Drive, Elkhart, IN 46514
Mailing Address: 53075 Frederic Drive, Elkhart, IN 46514
FESOP No.: F039-22633-00643

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-**0178**, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-**6865**), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Allen Foods, Inc.
Source Address: 53075 Frederic Drive, Elkhart, IN 46514
Mailing Address: 53075 Frederic Drive, Elkhart, IN 46514
FESOP No.: F039-22633-00643
Facility: Seven (7) Dry Ingredient Storage Silos (021, 022, 030, 031, 032, 033, and 034)
Parameter: Total amount (in tons) of dry ingredient input
Limit: 62,678 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Allen Foods, Inc.
Source Address: 53075 Frederic Drive, Elkhart, IN 46514
Mailing Address: 53075 Frederic Drive, Elkhart, IN 46514
FESOP No.: F039-22633-00643
Facility: Three (3) Use Bins (035, 036, and 037)
Parameter: Total amount (in tons) of dry ingredient input
Limit: 62,678 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Allen Foods, Inc.
Source Address: 53075 Frederic Drive, Elkhart, IN 46514
Mailing Address: 53075 Frederic Drive, Elkhart, IN 46514
FESOP No.: F039-22633-00643
Facility: Nine (9) Hoppers (038, 039, 040, 041, 042, 043, 044, 045 and 046)
Parameter: Total amount (in tons) of dry ingredient input
Limit: 62,678 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Allen Foods, Inc.
Source Address: 53075 Frederic Drive, Elkhart, IN 46514
Mailing Address: 53075 Frederic Drive, Elkhart, IN 46514
FESOP No.: F039-22633-00643

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by: ______________________________

Title / Position: ______________________________

Date: ______________________________

Phone: ______________________________

Attach a signed certification to complete this report.

Mail to: Permit Administration & Development Section
Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Allen Foods, Inc.
53075 Frederic Drive,
Elkhart, Indiana 46514

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____,I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____ .
(Company Name)

4. I hereby certify that Allen Foods, Inc., located at 53075 Frederic Drive, Elkhart, Indiana 46514, completed construction of the stationary commercial bakery on _____ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on January 31, 2006 and as permitted pursuant to the Federally Enforceable State Operating Permit (FESOP) No. 039-22633-00643 issued on _____.

5. Additional _____ were constructed/substituted as described in the attachment to this document
(operations/facilities)
and were not made in accordance with the construction permit. (Delete this statement if it does not apply.)

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

_____.
Signature

_____.
Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on this _____ day of _____, 20 _____ .

My Commission expires: _____.

_____.
Signature

_____.
Name (typed or printed)

ATTACHMENT A

FUGITIVE DUST CONTROL PLAN

(a) Fugitive particulate matter emissions from paved roads and parking lots shall be controlled by cleaning by vacuum sweeping on an as needed basis.

(b) There will be no unpaved roads or parking lots at the facility.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (TSD) for a New Source Construction Permit and a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	**Allen Foods, Inc.**
Source Location:	**53075 Frederic Drive, Elkhart, Indiana 46514**
County:	**Elkhart**
SIC Code:	**2051 (Manufacturing of Bread and Other Bakery Products, Except Cookies and Crackers)**
Operation Permit No.:	**039-22633-00643**
Reviewer:	**Nathan C. Bell**

On June 7, 2006, the Office of Air Quality (OAQ) had a notice published in The Elkhart Truth, Elkhart, Indiana, stating that Allen Foods, Inc. had applied for a New Source Construction Permit and a Federally Enforceable State Operating Permit (FESOP) to construct and operate a stationary commercial bakery located at 53075 Frederic Drive, Elkhart, Indiana 46514. The notice also stated that the OAQ proposed to issue a NSR/FESOP for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

No comments were received from the source or the public during the public notice period for the NSR/FESOP No. 039-22633-00643.

Additional Changes To Permit

IDEM, OAQ has decided to make the following additional revisions to the permit:

(a) Item (f) has been deleted from the Condition C.20, since it was previously added to the permit in error; and

(b) The Compliance Branch telephone and fax numbers have been updated on the Emergency Occurrence Report form.

The permit is revised as follows with deleted language as ~~strikeouts~~ and new language **bolded**.

C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

...

~~(f) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section - General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.~~

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-~~5674~~**0178**
Fax: 317-233-~~5967~~**6865**

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Allen Foods, Inc.
Source Address: 53075 Frederic Drive, Elkhart, IN 46514
Mailing Address: 53075 Frederic Drive, Elkhart, IN 46514
FESOP No.: F039-22633-00643

This form consists of 2 pages Page 1 of 2

☐ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-~~5674~~**0178**, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-~~5967~~**6865**), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a New Source Construction Permit and a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	**Allen Foods, Inc.**
Source Location:	**53075 Frederic Drive, Elkhart, IN 46514**
County:	**Elkhart**
SIC Code:	**2051 (Manufacturing of Bread and Other Bakery Products, Except Cookies and Crackers)**
Operation Permit No.:	**039-22633-00643**
Reviewer:	**Nathan C. Bell**

On January 31, 2006, the Office of Air Quality (OAQ) received an application from Allen Foods, Inc. relating to the construction and operation of a stationary commercial bakery.

Emission Units and Pollution Control Equipment Receiving New Source Review Approval

Because this source is transitioning from a Registration to a FESOP, all emission units at this source will be receiving new source review approval. The following emission units and pollution control equipment are receiving new source review approval:

(a) one (1) dry ingredient storage and conveyance system, to be installed in 2006, including, but not limited to, pneumatic conveyance process equipment and piping, storage silos, use bins, weigh scale hoppers, ingredient mixers, transfer equipment, other process equipment and piping, and associated pollution control equipment, with a maximum capacity of 14,310 pounds of dry ingredients per hour. The pneumatic conveyance system includes the following emission units:

(1) two (2) dry ingredient storage silos, identified as emission units 021 and 022, to be installed in 2006, each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(2) five (5) dry ingredient storage silos, identified as emission units 030 through 034, to be installed in 2006, each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(3) two (2) dry ingredient use bins, identified as emission units 035 and 036, to be installed in 2006, each with a maximum storage capacity of 2,000 pounds of dry ingredients, and each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(4) one (1) dusting flour use bin, identified as emission unit 037, to be installed in 2006, with a maximum storage capacity of 2,000 pounds of dusting flour, and equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(5) four (4) muffin scale hoppers, identified as emission units 038 through 041, to be installed in 2006, each with a maximum storage capacity of 800 pounds of dry ingredients, and each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(6) three (3) bread scale hoppers, identified as emission units 042 through 044, to be installed in 2006, each with a maximum storage capacity of 1,600 pounds of dry ingredients, and each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(7) two (2) dusting flour hoppers, identified as emission units 045 and 046, to be installed in 2006, each equipped with one (1) filter unit for control of particulate matter emissions, and exhausting to the indoors.

(b) one (1) english muffin oven, identified as emission unit 001, to be installed in 2006, rated at 2.85 MMBtu per hour, with a process rate of 504 pieces per minute, exhausting through seven (7) vents (S01 through S07);

(c) one (1) english muffin oven, identified as emission unit 027, to be installed in 2006, rated at 2.40 MMBtu per hour, with a process rate of 504 pieces per minute, exhausting through seven (7) vents (S08 through S14);

(d) one (1) bread oven, identified as emission unit 028, to be installed in 2006, rated at 10.08 MMBtu per hour, with a process rate of 160 loaves per minute, with volatile organic emissions controlled by one (1) natural gas-fired catalytic oxidizer, identified as emission unit 029, rated at 3.0 MMBtu/hr, with a minimum operating temperature of 600°F, exhausting through one (1) vent (S17); and

(e) one (1) auxiliary boiler, burning natural gas, identified as emission unit 002, to be installed in 2006, rated at 1 MMBtu per hour;

(f) one (1) process hot water heater, burning natural gas, identified as emission unit 003, to be installed in 2006, rated at 0.54 MMBtu per hour;

(g) one (1) domestic hot water heater, burning natural gas, identified as emission unit 004, to be installed in 2006, rated at 0.3 MMBtu per hour;

(h) five (5) space heaters, burning natural gas, identified as emission units 005 through 009, to be installed in 2006, each rated at 3.5 MMBtu per hour;

(i) eleven (11) space heaters, burning natural gas, identified as emission units 010 through 020, to be installed in 2006, each rated at 0.12 MMBtu per hour; and

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Registration No. 039-21980-00643, issued on December 28, 2005.

Emission units listed in the above section under (a)(1), (b), (e), (f), (g), (h), and (i) were previously permitted under Registration No. 039-21980-00643.

All terms and conditions from previous approvals were incorporated into this FESOP.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Diameter (ft)	Height (ft)	Flow Rate (acfm)	Temperature (^{o}F)
S01, S02 & S03	English Muffin Oven (001)	30	NA	3000 (total)	550
S04	English Muffin Oven (001)	30	NA	1000	100
S05, S06 & S07	English Muffin Oven (001)	30	NA	4000 (total)	550
S08, S09 & S10	English Muffin Oven (027)	30	NA	3000 (total)	550
S11	English Muffin Oven (027)	30	NA	1000	100
S12, S13 & S14	English Muffin Oven (027)	30	NA	4000 (total)	550
S15	Bread Oven (028) (front)	1.17	NA	2500 scfm	300-450
S16	Bread Oven (028) (rear)	1.33	NA	2500 scfm	300-450
S17	Catalytic Oxidizer (029)	NA	NA	8500 scfm	600-1050

NA = not available

Air Pollution Control Justification as an Integral Part of the Process

The company had submitted the following justification for considering each of the filter units controlling the silos, use bins, and scale hoppers as an integral to the pneumatic conveyance process:

The company states that each of the filter units associated with the silos, use bins, and scale hoppers are necessary to pneumatically transfer dry ingredients in the process, with each filter unit relieving pressure and minimizing product loss when each vessel is being filled or emptied. The dry ingredients recovered by the filter units are recycled back in to the process (i.e., internally discharge back into each vessel). The company provided a schematic diagram of the silo system. The filter unit exhaust is vented inside the building with no direct exhaust to the outside air.

IDEM, OAQ has evaluated the justifications and determined that the filter units will not be considered as an integral part of the pneumatic conveyance process. IDEM, OAQ has determined that while the filter units are necessary to neutralize the bin pressure, the filter units provide pollution control and the process could continue to be operated without the filter units in place. In addition, the recycled material does not make up 85% or greater of the raw material used in the process. Therefore, the permitting level will be determined using the potential to emit before the filter units.

Recommendation

The staff recommends to the Commissioner that the application be approved as a FESOP. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 31, 2006. Additional information was submitted by the source on April 5, 2006 and April 28, 2006.

Emission Calculations

(a) See Appendix A of this TSD for detailed emissions calculations (Appendix A, pages 1 through 6).

(b) VOCs emitted during fermentation (leavening) of bread and muffins have been assumed to be 97% ethanol and 3% acetaldehyde (VOC/HAP), based on the information provided in "Alternative Control Technology Document for Bakery Oven Emissions" (EPA 453/R-92-017, December 1992) and Henderson, D.C., 1977, "Commercial Bakeries as a Major Source of Reactive Volatile Organic Gases", U.S. EPA, Region XI Surveillance and Analysis Division. Since there is no AP-42 Emission Factor (EF) specific to bakery ovens for acetaldehyde, the source shall perform an initial one time performance test for the uncontrolled emissions of acetaldehyde from the bread oven and the controlled emissions of acetaldehyde from the catalytic oxidizer (See Testing Requirements).

Potential To Emit for Entire Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit (PTE) is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	295.54
PM-10	104.72
SO_2	0.10
NO_x	17.08
VOC	219.40
CO	14.35

HAPs	Potential To Emit (tons/year)
Benzene	negligible
Dichlorobenzene	negligible
Formaldehyde	0.01
n-Hexane	0.31
Toluene	negligible
Lead	negligible
Cadmium	negligible
Chromium	negligible
Manganese	negligible
Nickel	negligible
Acetaldehyde	6.55
TOTAL HAPs	**6.88**

(a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of particulate matter with a diameter less than ten (10) micrometers (PM10) is greater than one hundred (100) tons per year and the PTE of VOCs is greater than one hundred (100) tons per year. The PTE of all other regulated criteria pollutants are less than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7. The source will be issued a FESOP, because the source will limit its emissions below the Title V levels.

(b) The PTE (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM10	Attainment or Unclassifiable
PM2.5	Attainment or Unclassifiable
SO_2	Attainment
NO_2	Attainment or Unclassifiable
1-Hour Ozone	Maintenance Attainment
8-Hour Ozone	Basic Nonattainment
CO	Attainment or Unclassifiable
Lead	Attainment or Unclassifiable

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standard. Elkhart County has been designated as basic nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) Elkhart County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability – Entire Source section.

(c) Elkhart County has been classified as attainment or unclassifiable for all the other regulated criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(d) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit of Source After Issuance

The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of the FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential to Emit After Issuance (tons/year)							
Operation/Process	PM	PM-10(1)	SO_2	NO_X	VOC	CO	Total HAPs	Worst Single HAP
Natural Gas Combustion(2)	0.32	1.30	0.10	17.08	0.94	14.35	0.32	0.31 (n-Hexane)
Ingredient Storage and Conveying(3)	29.52(3)	10.34(3)	0	0	0	0	0	0
English Muffin Ovens(2)	0	0	0	0	18.19	0	0.55	0.55 (Acetaldehyde)
Bread Oven(4)	0	0	0	0	10.01(4)	0	0.30	0.30 (Acetaldehyde)
Total PTE After Issuance	29.85	11.64	0.10	17.08	29.15	14.35	1.17	0.85 (Acetaldehyde)
Title V Major Threshold Level	NA	100	100	100	100	100	25	10
PSD Major Threshold Level	250	250	250	NA	NA	250	NA	NA
Emission Offset Major Threshold Level	NA	NA	NA	100	100	NA	NA	NA

NA = Not applicable; negl. = negligible
(1) US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions
(2) Uncontrolled potential to emit.
(3) Total limited emissions of particulate matter (PM) and particulate matter with a diameter less than ten (10) micrometers (PM10) from the dry ingredient storage and conveying emission units, based on individual limits (see the State Rule Applicability – Entire Source section). Compliance with these limits combined with the potential PM and PM10 emissions from all other emission units at this source will limit the source-wide total potential to emit of PM and PM10 to less than 250 and 100 tons per 12 consecutive month period, respectively, will satisfy 326 IAC 2-8-4 (FESOP), and will render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (PSD) not applicable.
(4) In order to comply with 326 IAC 8-1-6 (BACT),
  (a) The VOC emissions from the bread oven (028) shall be controlled by a catalytic oxidizer.
  (b) The overall VOC control efficiency for the catalytic oxidizer (including the capture efficiency and destruction efficiency) shall be at least 95%, or the VOC outlet concentration shall not exceed 10 ppmv.
  (c) The VOC emissions from the bread oven (028) shall not exceed 2.29 pounds per hour. This VOC limit corresponds to the PTE of VOCs after catalytic oxidizer control with a control efficiency of 95%.
Compliance with these requirements will satisfy 326 IAC 2-8-4 (FESOP) and render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-3 (Emission Offset) not applicable

(a) This source is not a major PSD stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

(b) This source is not a Emission Offset major stationary source because no regulated nonattainment pollutant is emitted at a rate of 100 tons per year or greater. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the PTE of:

(a) each criteria pollutant is limited to less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This status is based on the potential to emit calculations of the source (see Appendix A).

Federal Rule Applicability

(a) This source is not subject to the requirements of 326 IAC 12 or 40 CFR 60, Subpart DD, (60.300 through 60.304), New Source Performance Standards (NSPS) for Grain Elevators, since this source does not contain any grain terminal elevators or grain storage elevators as defined by 40 CFR 60.301. This source contains dry ingredient (e.g. flour, corn meal, etc.) storage silos that are not equipped with grain elevators.

(b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

(c) This source is not subject to the requirements of 40 CFR 63, Subpart DDDDD, (63.7480 through 63.7575), NESHAPs for Industrial, Commercial, and Institutional Boilers and Process Heaters, because the source is not a major source of HAPs.

(d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 20 and 40 CFR Part 61, 63) included in the permit for this source.

(e) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this source. Such requirements apply to a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, at a major source that is required to obtain a Part 70 or 71 permit, if the PSEU meets the following criteria:

(1) The unit is subject to an emission limitation or standard for an applicable regulated air pollutant,

(2) The unit uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard, and

(3) The unit has a potential to emit (PTE) before controls equal to or greater than 100 percent of the amount (tons per year) of the pollutant required for a source to be classified as a Part 70 major source.

This source is a FESOP source and is not a major Part 70 source. This source has accepted federally enforceable limits rendering 326 IAC 2-7 (Part 70) not applicable. Therefore, the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The requirements of 326 IAC 2-2 (PSD) are not applicable to this source, since this source will be constructed after the applicability date of August 7, 1977, it is not one of the 28 listed source categories defined in 326 IAC 2-2-1(gg)(1), no major modifications were done to this source, and the potential to emit of all attainment regulated pollutants is less than, or limited to less than, 250 tons per year.

Emissions of particulate matter (PM) and particulate matter with a diameter less than ten (10) micrometers (PM10) from the dry ingredient storage and conveying emission units shall be limited as follows:

Emission Unit Type	Total Dry Ingredient Throughput Limit (tons/year)	PM Limit (lbs/ton)	PM10 Limit (lbs/ton)
7 Dry Ingredient Storage Silos (021, 022, 030, 031, 032, 033, and 034)	62,678	0.314	0.110
3 Use Bins (035, 036, and 037)	62,678	0.314	0.110
9 Hoppers (038, 039, 040, 041, 042, 043, 044, 045 and 046)	62,678	0.314	0.110

* Total dry ingredient throughput limit in tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits combined with the potential PM and PM10 emissions from all other emission units at this source will limit the source-wide total potential to emit of PM and PM10 to less than 250 tons per 12 consecutive month period and will render 326 IAC 2-2 (PSD) not applicable.

Elkhart County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. Assuming that PM10 emissions represent PM2.5 emissions, compliance with the PM10 limit above shall also limit the total source-wide emissions of PM2.5 to less than 100 tons 12 consecutive month period and will render 326 IAC 2-2 (PSD) not applicable.

326 IAC 2-3 (Emission Offset)

The requirements of 326 IAC 2-3 (Emission Offset) apply to major sources or major modifications constructed in an area designated as non-attainment. This source will be constructed in Elkhart County, which has been designated as basic nonattainment for the 8-hour ozone standard. The uncontrolled potential to emit NOx is less than 100 tons per year. According to the Best Available Control Technology (BACT) analysis contained in Appendix B, the source shall comply with the following VOC emission limit:

(a) The VOC emissions from the bread oven (028) controlling the bread oven (028) shall not exceed 2.29 pounds per hour.

Compliance with this limit combined with the potential VOC emissions from all other emission units at this source will limit the source-wide total potential to emit of VOCs to less than 100 tons per 12 consecutive month period and will render 326 IAC 2-3 (Emission Offset) not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The requirements of 326 IAC 2-4.1 are not applicable to this source, since the potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is located in Elkhart County, it is not required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, and it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year.

326 IAC 2-8-4 (FESOP)

(a) Pursuant to 326 IAC 2-8-4 (FESOP), emissions of particulate matter (PM) and particulate matter with a diameter less than ten (10) micrometers (PM10) from the dry ingredient storage and conveying emission units shall be limited as follows:

Emission Unit Type	Total Dry Ingredient Throughput Limit (tons/year)	PM Limit (lbs/ton)	PM10 Limit (lbs/ton)
7 Dry Ingredient Storage Silos (021, 022, 030, 031, 032, 033, and 034)	62,678	0.314	0.110
3 Use Bins (035, 036, and 037)	62,678	0.314	0.110
9 Hoppers (038, 039, 040, 041, 042, 043, 044, 045 and 046)	62,678	0.314	0.110

* Total dry ingredient throughput limit in tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) According to the Best Available Control Technology (BACT) analysis contained in Appendix B, the source shall comply with the following VOC emission limit:

The VOC emissions from the bread oven (028) controlling the bread oven (028) shall not exceed 2.29 pounds per hour.

Compliance with these limits combined with the potential PM10 and VOC emissions from all other emission units at this source will limit the source-wide total potential to emit of PM10 and VOCs to less than 100 tons per 12 consecutive month period, will satisfy 326 IAC 2-8-4 (FESOP), and will render 326 IAC 2-7 (Part 70 Permits) not applicable.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

This source is subject to 326 IAC 6-5, since it is a new source of fugitive particulate matter emissions, requiring a permit as set forth in 326 IAC 2, and which has not received all the necessary preconstruction approvals before December 13, 1985. Pursuant to 326 IAC 6-5, a fugitive dust control plan must be submitted, reviewed and approved. The fugitive dust control plan for this source includes the following:

(a) Fugitive particulate matter emissions from paved roads and parking lots shall be controlled by cleaning by vacuum sweeping on an as needed basis.

(b) There will be no unpaved roads or parking lots at the facility.

State Rule Applicability - Individual Facilities

326 IAC 8-1-6 (VOC rules: General Reduction Requirements for New Facilities)

(a) The new bread oven (028) will be constructed after January 1, 1980 and has potential VOC emissions greater than twenty-five (25) tons per year. Therefore, the bread oven is subject to 326 IAC 8-1-6 and the Permittee is required to control VOC emissions from the bread oven using the Best Available Control Technology (BACT). According to the BACT analysis contained in Appendix B, IDEM, OAQ has determined that the following requirements represent BACT for the bread oven:

(1) The VOC emissions from the bread oven (028) shall be controlled by a catalytic oxidizer.

(2) The overall VOC control efficiency for the catalytic oxidizer (including the capture efficiency and destruction efficiency) shall be at least 95%, or the VOC outlet concentration shall not exceed 10 ppmv.

(3) The VOC emissions from the bread oven (028) shall not exceed 2.29 pounds per hour.

The above emission limit was calculated as follows:

VOC Limit (lbs/hr) = PTE (tons/yr)*(1 - control efficiency)*(2000 lbs/ton)*(1 yr/8760 hrs)

VOC Limit (lbs/hr) = (200.27 tons/yr)*(1 - 0.95)*(2000 lbs/ton)*(1 yr/8760 hrs) = 2.29 lbs/hr

(b) The requirements of 326 IAC 8-1-6 are not applicable to all the other emission units at this source, since they each do not have the potential to emit greater than twenty-five (25) tons of VOCs per year. There are no other rules within 326 IAC 8 that are applicable to all the other emission units at this source.

State Rule Applicability - Dry Ingredient Storage and Conveying

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

The requirements of 326 IAC 6-3 are applicable to each of the dry ingredient storage and conveying emission units. Pursuant to 326 IAC 6-3-2(e)(2), the particulate emissions from each of the following dry ingredient storage and conveying emission units shall not exceed the allowable PM emission rate as listed in the table below:

Emission Unit Type	Maximum Process Weight Rate (tons/hr)	326 IAC 6-3-2 Allowable PM Emission Rate (lbs/hr)
Each Dry Ingredient Storage Silo	16.68	27.0
Each Dry Ingredient Use Bin	9.75	18.9
Dusting Flour Use Bin	9.75	18.9
Each Muffin Scale Hopper	7.50	15.8
Each Bread Scale Hopper	7.50	15.8

The pound per hour limitations were calculated with the following equation:

Interpolation of the data in the table in 326 IAC 6-3-2(e)(2) for the process weight rates up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and
P = process weight rate in tons per hour

In order to comply with the allowable rate of emission, particulate from each of the dry ingredient storage and conveying emission units shall be controlled by a filter unit at all times that each of the dry ingredient storage and conveying emission units is in operation.

State Rule Applicability - Ovens, Boilers, and Heaters

326 IAC 6-2 (Particulate Emissions from Indirect Heating Units)

(a) The natural gas-fired english muffin ovens, bread oven, and space heaters are each not subject to 326 IAC 6-2 as they are not sources of indirect heating.

(b) The natural gas-fired auxiliary boiler, process hot water heater, and domestic hot water heater, are subject to the requirements of 326 IAC 6-2-3, since each of the units are sources of indirect heating, were constructed after September 21, 1983, and are located in Elkhart County. Pursuant to this rule, particulate matter emissions from the auxiliary boiler, process hot water heater, and domestic hot water heater shall be limited by the following equation:

$Pt = 1.09/Q^{0.26}$ where Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input.

Pursuant to this rule, the total particulate emissions from the from the auxiliary boiler, process hot water heater, and domestic hot water heater shall not exceed 0.6 lb/MMBtu, based on a total source maximum operating capacity of 1.84 MMBtu/hr.

The auxiliary boiler, process hot water heater, and domestic hot water heater have a potential to emit particulate matter as follows:

PTE PM = (0.015 ton/yr PM)*(2000 lb/ton) / [(8760 hr/yr)*(1.84 MMBtu/hr)] = 0.002 lb/MMBtu PM

Therefore, the auxiliary boiler, process hot water heater, and domestic hot water heater will comply with this rule.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

(a) Pursuant to 326 IAC 6-3-1(b)(14), the natural gas-fired english muffin ovens, bread oven, and space heaters are each exempt from the requirements of 326 IAC 6-3, because they each have a potential particulate emissions less than five hundred fifty-one thousandths (0.551) pound per hour.

(b) Pursuant to 326 IAC 6-3-1(b)(1), the auxiliary boiler, process hot water heater, and domestic hot water heater are each exempt from the requirements of 326 IAC 6-3, because they each are a source of indirect heating.

326 IAC 7-1 (Sulfur dioxide emission limitations: applicability)

The each of the ovens, boilers, and heaters are not subject to the requirements of 326 IAC 7-1, because the potential and the actual emissions are less than twenty-five (25) tons per year and ten (10) pounds per hour respectively.

Testing Requirements

(a) In order to demonstrate compliance with the BACT requirements, the Permittee shall perform VOC (including emission rate and overall control efficiency of the catalytic oxidizer) testing for the catalytic oxidizer, within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

(b) In order to verify the emission factor for acetaldehyde, the Permittee shall perform an initial one time performance test for the uncontrolled emissions of acetaldehyde from the bread oven and the controlled emissions of acetaldehyde from the catalytic oxidizer, within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner.

(c) Pursuant to Registration No. 039-21980-00643 and in order to verify the emission factor, the Permittee shall perform an initial one time performance test for the uncontrolled VOC emissions from either english muffin oven (001) or english muffin oven (027), within 60 days after the first oven has achieved its maximum capacity, but no later than 180 days after startup of the first oven, utilizing methods as approved by the Commissioner.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the approporiate corrective actions within a specific time period.

The compliance determination requirements applicable to the bread oven are as follows:

(a) In order to comply with the BACT requirements, the catalytic oxidizer shall be in operation and control emissions from the bread oven at all times the bread oven is in operation.

(b) A continuous monitoring system shall be calibrated, maintained, and operated on the catalytic oxidizer for measuring operating temperature. The output of this system shall be recorded continuously. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the catalytic oxidizer at or above a temperature of 600°F. The Permittee shall determine the average temperature from the most recent valid stack test that demonstrates compliance with the BACT requirements, as approved by IDEM. On and after the date the approved stack test results are available, the Permittee shall operate the catalytic oxidizer at or above the average temperature as observed during the compliant stack test.

(c) The Permittee shall determine the appropriate duct pressure or fan amperage of the capture system for the catalytic oxidizer from the most recent valid stack test that demonstrates compliance with the BACT requirements, as approved by IDEM. The duct pressure or fan amperage shall be observed at least once per day when the catalytic oxidizer is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

These compliance determination requirements are necessary because the catalytic oxidizer must be installed and operated properly to ensure compliance with 326 IAC 8-1-6 (BACT), 326 IAC 2-8 (FESOP), and 326 IAC 2-3 (Emission Offset).

The compliance monitoring requirements applicable to this source are as follows:

(a) Each of the dry ingredient storage and conveying emission units has applicable compliance monitoring requirements as specified below:

(1) Visible emission notations of each of the filter unit stack exhausts associated with the dry ingredient storage and conveying emission units shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(2) The Permittee shall record the pressure drop across each of the filter units used in conjunction with each of the dry ingredient storage and conveying emission units, at least once per day when the process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the filter unit is outside the normal range of 1.0 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A

pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(3) For a single compartment filter unit controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(4) For a single compartment filter unit controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the dry ingredient storage or conveying emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(5) Filter failure can be indicated by a significant drop in the filter's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

These compliance monitoring requirements are necessary because each of the filter units must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), 326 IAC 2-8-4 (FESOP), and 326 IAC 2-2 (PSD).

Conclusion

The construction and operation of this source shall be subject to the conditions of the attached New Source Construction Permit and Federally Enforceable State Operating Permit (FESOP) No 039-22633-00643.

Indiana Department of Environmental Management
Office of Air Quality

Appendix B
Best Available Control Technology (BACT) Determination

Technical Support Document (TSD) for a New Source Construction Permit and a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	**Allen Foods, Inc.**
Source Location:	**53075 Frederic Drive, Elkhart, IN 46514**
County:	**Elkhart**
SIC Code:	**2051 (Manufacturing of Bread and Other Bakery Products, Except Cookies and Crackers)**
Operation Permit No.:	**039-22633-00643**
Reviewer:	**Nathan C. Bell**

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) has performed the following Best Available Control Technology (BACT) review for the modification to the existing bakery, owned and operated by Allen Foods, Inc. located at 53075 Frederic Drive, Elkhart, Indiana 46514. The modification consists of adding one (1) english muffin oven (027), one (1) bread oven (028), and five (5) flour silos (030 through 034).

Pursuant to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), BACT is required for all facilities constructed after January 1, 1980 that have potential VOC emissions of equal to or greater than twenty-five (25) tons per year and are not regulated by other rules in 326 IAC 8. Based on the calculations (see Appendix A) and the analysis of applicable state regulations (see State Rule Applicability section of TSD), the one (1) bread oven (028) is subject to the requirements of 326 IAC 8-1-6. Below is a table that includes emission units that have the potential to emit (PTE) volatile organic compounds (VOCs) and the associated uncontrolled PTE of VOCs.

Emission Unit	Uncontrolled PTE of VOCs (tons/year)
English Muffin Oven (001)	9.10
English Muffin Oven (027)	9.10
Bread Oven (028)	200.27

IDEM, OAQ conducts BACT analyses in accordance with the *"Top-Down" Best Available Control Technology* process, which outlines the steps for conducting a top-down BACT analysis. Those steps are listed below:

(1) Identify all potentially available control options;

(2) Eliminate technically infeasible control options;

(3) Rank remaining control technologies by control effectiveness;

(4) Evaluate the most effective controls and document the results as necessary; and

(5) Select BACT.

In accordance with EPA guidance, the BACT analysis should take into account the energy, environmental, and economic impacts. Emission reductions may be achieved through the application of available control techniques, changes in process design, and/or operational limitations. This BACT determination is based on the following information:

(a) The BACT analysis information submitted by Allen Foods, Inc. on January 31, 2006 and April 5, 2006;

(b) The Alternative Control Technology Document for Bakery Oven Emissions (EPA-453/R-92-017)

(c) Information from vendors/suppliers;

(d) The EPA RACT/BACT/LAER Clearinghouse (RBLC); and

(e) State and local air quality rules and permits.

Introduction

The VOC emissions from the new bread oven are mainly ethanol from the yeast fermentation process. The potential to emit of VOC from the new bread oven is greater than twenty-five (25) tons per year. Since this process is not regulated by any other rule in 326 IAC 8, the Permittee is required to control VOC emissions from the new bread oven pursuant to the provisions of 326 IAC 8-1-6 (BACT).

Step 1 – Identify All Potentially Available Control Options

Based on the information reviewed for this BACT determination, the following potentially available control technologies were identified for controlling VOC emissions from the bread oven (listed in descending order of most technically feasible):

(a) Catalytic Oxidizer:

Catalytic oxidation is the process of oxidizing organic contaminants in a waste gas stream within a heated chamber containing a catalyst bed in the presence of oxygen for sufficient time to completely oxidize the organic contaminants to carbon dioxide and water. The catalyst is used to lower the activation energy of the oxidation reaction. The residence time, temperature, flow velocity and mixing, the oxygen concentration, and type of catalyst used in the combustion chamber affect the oxidation rate and destruction efficiency. Catalytic oxidizers typically require combustion of a auxiliary fuel (e.g., natural gas) to maintain combustion chamber temperature high enough to completely oxidize the contaminant gases. Catalytic oxidizers operate at lower temperatures and require less fuel than thermal oxidizers, they have a smaller footprint, and they need little or no insulation. Catalytic oxidizers are typically designed to have a residence time of 0.5 seconds or less and combustion chamber temperatures between 600 and 1,200°F. The types of catalysts used include platinum, platinum alloys, copper chromate, copper oxide, chromium, manganese, and nickel. These catalysts are deposited in thin layers on an inert substrate, usually a honeycomb shaped ceramic.

The two types of catalytic oxidation systems include recuperative and regenerative catalytic oxidizers, which are differentiated by the type of heat recovery equipment used. In a recuperative catalytic oxidizer, the waste gas stream is preheated using the heat content of the treated gas stream, resulting in improved oxidizer efficiency and significant fuel cost savings. In a regenerative thermal oxidizer, a high-density media such as a packed ceramic bed, which was heated in a previous cycle, is used to preheat the incoming waste gas stream, resulting in improved oxidizer efficiency and significant fuel cost savings. VOC destruction efficiencies greater than 98% are achievable under certain operating conditions (EPA-453/R-92-017). However, based on the information reviewed for this BACT determination, a VOC destruction efficiency of 95% or a VOC outlet concentration of 10 ppmv or less is achievable on a consistent basis under normal operational conditions for a typical bakery bread oven.

(b) Thermal Oxidizer:

Thermal oxidation is the process of oxidizing organic contaminants in a waste gas stream by raising the temperature above the autoignition point in the presence of oxygen for sufficient time to completely oxidize the organic contaminants to carbon dioxide and water. The residence time, temperature, flow velocity and mixing, and the oxygen concentration in the combustion chamber affect the oxidation rate and destruction efficiency. Thermal oxidizers typically require combustion of a auxiliary fuel (e.g., natural gas) to maintain combustion chamber temperature high enough to completely oxidize the contaminant gases. Thermal oxidizers are typically designed to have a residence time of one second or less and combustion chamber temperatures between 1,200 and 2,000°F.

The three types of thermal oxidation systems include direct flame, recuperative, and regenerative thermal oxidizers, which are differentiated by the type of heat recovery equipment used. A direct flame thermal oxidizer consists of only a combustion chamber with no heat recovery equipment. In a recuperative thermal oxidizer, the waste gas stream is preheated using the heat content of the treated gas stream, resulting in improved oxidizer efficiency and significant fuel cost savings. In a regenerative thermal oxidizer, a high-density media such as a packed ceramic bed, which was heated in a previous cycle, is used to preheat the incoming waste gas stream, resulting in improved oxidizer efficiency and significant fuel cost savings. In general, thermal oxidizers are less efficient at treating waste gas streams with highly variable flowrates, since the variable flowrate results in varying residence times, combustion chamber temperature, and poor mixing. VOC destruction efficiencies greater than 98% are achievable under certain operating conditions (EPA-453/R-92-017). However, a VOC destruction efficiency of 95% is achievable on a consistent basis under normal operational conditions for a typical bakery bread oven.

(c) Wet Packed Bed Scrubber:

A wet packed bed scrubber is an absorption system in which a waste gas stream is interacted with a scrubbing liquid inside a contact chamber containing a bed of packing media in order to strip contaminant gases from the waste gas stream through the process of dissolution. Water is the most commonly used scrubbing liquid. Other solvents may be used depending on the components of the waste gas stream. Based on information provided by vendors, a wet packed bed scrubber can achieve a VOC removal efficiency of at least 95% on a consistent basis under normal operational conditions for a typical bakery bread oven.

(d) Biofilter:

Biofiltration is a process in which a waste gas stream is passed through a bed of peat, compost, bark, soil, gravel, or other inorganic media in order to strip organic contaminant gases from the waste gas stream through the process of dissolution in the bed moisture and adsorption to the bed media. Under aerobic conditions, microorganisms naturally present in the bed oxidize the organic contaminant gases within the bed to carbon dioxide, water, and additional biomass through metabolic processes. If the temperature of the waste gas stream is too high, the gas stream must be cooled to an optimum temperature before it can be treated in the biofilter in order to maintain the viability of the microorganisms. In addition, the bed must be monitored and maintained at an optimum moisture content and pH in order to prevent cracking of the bed media and to maintain the viability of the microorganisms. Based on information provided by vendors, a biofilter can achieve a VOC removal efficiency of at least 95% on a consistent basis under normal operational conditions for a typical bakery bread oven.

(e) Carbon Adsorption Unit:

Carbon adsorption is a process by which VOC is retained on a granular carbon surface, which is highly porous and has a very large surface-to-volume ratio. Carbon adsorption systems can operate in two phases: adsorption and desorption. Adsorption is rapid and removes most of the VOCs in the stream. Eventually, the adsorbent becomes saturated with the vapors and the

system's efficiency drops. The adsorbent must be regenerated or replaced soon after efficiency begins to decline. In regenerative systems, the adsorbent is reactivated with steam or hot air in order to desorb the absorbate (VOC vapors) from the adsorbent and the adsorbate and regenerated absorbent can be recovered for reuse or disposal. Non-regenerative systems require the removal of the spent adsorbent and replacement with fresh adsorbent. Based on the information reviewed for this BACT determination, the use of carbon adsorption is infeasible because fats and oils in the bakery oven exhaust clog carbon pores and ethanol is difficult to strip from the carbon.

(6) Condensation Unit:

Condensation is the process by which the temperature of the waste gas stream is lowered to below the dew points of the contaminants gases in waste gas. A refrigeration condenser normally provides a VOC control efficiency greater than 90%. Based on the information reviewed for this BACT determination, the condensation method is infeasible because of the high air flows, temperatures, and moisture content in the bakery oven exhaust. In addition, the fats and oils contained in the exhaust reduce the control efficiency and create sanitation concerns.

Step 2 – Eliminate Technically Infeasible Control Options

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of carbon adsorption and condensation are not technically feasible options for this source for the following reasons:

(a) The use of carbon adsorption is infeasible because fats and oils in the bakery oven exhaust clog carbon pores and ethanol is difficult to strip from the carbon.

(b) The condensation method is infeasible because of the high air flows, temperatures, and moisture content in the bakery oven exhaust. In addition, the fats and oils contained in the exhaust reduce the control efficiency and create sanitation concerns.

Step 3 – Rank Remaining Control Technologies by Control Effectiveness

The remaining technically feasible options for controlling VOC emissions from the new bread oven are as follows (listed in descending order of most technically feasible):

Control Technology	Control Efficiency (%)
Catalytic Oxidizer	95
Thermal Oxidizer	95
Wet Packed Bed Scrubber	95
Biofilter	95

IDEM is aware that that the above control technologies may be able to periodically achieve control efficiencies that exceed 95% under certain operating conditions. However, BACT must be achievable on a consistent basis under normal operational conditions. BACT limitations do not necessarily reflect the highest possible control efficiency achievable by the technology on which the emission limitation is based. The permitting authority has the discretion to base the emission limitation on a control efficiency that is somewhat lower than the optimal level. There are several reasons why the permitting authority might choose to do this. One reason is that the control efficiency achievable through the use of the technology may fluctuate, so that it would not always achieve its optimal control efficiency. In that case, setting the emission limitation to reflect the highest control efficiency would make violations of the permit unavoidable. To account for this possibility, a permitting authority must be allowed a certain degree of discretion to set the emission limitation at a level that does not necessarily reflect the highest possible control efficiency, but will allow the Permittee to achieve compliance consistently. While we recognize that greater than 95% may be achievable as an average during testing, IDEM allows for sources to include a safety factor, or margin of error, to allow for minor variations in the operation of the emission units and the control device.

Step 4 – Evaluate the Most Effective Controls and Document Results

The following sources of information were reviewed to evaluate the remaining technically feasible options for controlling VOC emissions from the new bread oven:

(a) The Alternative Control Technology Document for Bakery Oven Emissions (EPA-453/R-92-017) concludes that thermal oxidation and catalytic oxidization are technically feasible control options, with catalytic oxidation more cost-effective than thermal oxidation. Catalytic oxidizer is the primary control technology used throughout the country for controlling VOC emissions from large bakery ovens.

(b) EPA's RACT/BACT/LAER Clearinghouse (RBLC) under SIC code 2051 and under Process Type Code 70.003 (Bakery Oven), as well as, IDEM permits issued to date. The review identified the following permits with BACT requirements for bakery ovens (listed in descending order of most stringent BACT requirement, with the proposed BACT for this source included for reference):

Company	RBLC ID or Permit No.	Date Issued and State	Type of Unit	BACT Requirements	Note
Allen Foods Inc.	IDEM OAQ Permit No. F039-22633-00643	Proposed (IN)	Bakery Oven	Catalytic oxidizer with 95% DRE or the VOC outlet concentration shall not exceed 10 ppmv.	Located in an Ozone Non-attainment Area
Certified Grocers of California Ltd.	RBLC ID: CA-0468 Permit Nos.: 228274 219899	9/14/90 (CA)	Bakery Oven	Catalytic afterburner with 95% DRE	Located in an Ozone Non-attainment Area
Freund Baking Company	RBLC ID: CA-0859 Permit No.: 328570	7/16/97 (CA)	Bakery Oven	Catalytic oxidizer with 94.5% DRE	Located in an Ozone Non-attainment Area
Maple Leaf Bakery	RBLC ID: CA-0854 Permit No.: 0473-170	10/6/98 (CA)	Bakery Oven	Catalytic oxidizer with 92% DRE	Located in an Ozone Non-attainment Area
Holsum Bakery	RBLC ID: AZ-0029 Permit No.: 95-0432	3/1/96 (AZ)	Bakery Oven	Quencher/Scrubber Emission Limit: 49.9 tons/yr VOCs	Located in an Ozone Non-attainment Area
Kroger Co. – Indianapolis Bakery	IDEM OAQ Permit No. SPR 097-16909-00161	5/1/03 (IN)	Bakery Oven	No Add On Controls Required. Emission Limit: 49 tons/yr VOCs from the bread oven.	Located in an Ozone Non-attainment Area
Holsum of Fort Wayne, Inc.	IDEM OAQ Permit No. SPM 091-21007-00106	7/26/05 (IN)	Bakery Oven	No Add On Controls Required. Emission Limit: 60 tons/yr VOCs from the bread oven.	Located in an Ozone Non-attainment Area
Interstate Brands	IDEM OAQ Permit No. F097-7413-00171	12/12/97 (IN)	Bakery Oven	No Add On Controls Required. Emission Limit: 91.4 tons/yr VOCs from the entire source.	Located in an Ozone Attainment Area

DRE = destruction and removal efficiency

(c) Allen Foods, Inc. provided the following summaries for five (5) permitted sources with bakery ovens, which are not documented in the RBLC (listed in descending order by date issued):

Company	Permit No.	Date Issued	Type of Unit	Pollution Control Requirement
George Weston Bakeries, Inc. (Arnold Foods Co.) (Gastonia, NC)	Const/Op Permit No. 08104R05	5/9/05	Bakery Oven	Catalytic oxidizer with 95% DRE in order to limit source-wide VOC to less than 100 tons/yr
Butter Krust Baking Co. Plant 2 (Northumberland, PA)	Const Approval No. 49-317-003 State Only Permit No. 49-00052	12/4/01 10/6/05	Bakery Oven	Catalytic oxidizer with 95% DRE determined as BACT
Stroehmann Bakeries, Inc. (Norristown, PA)	Const Approval No. 46-003A TV Operating Permit No. 46-00003	5/4/01 2/2/04	Bakery Oven	Presumptive VOC RACT: install, maintain, and operate catalytic oxidizer in accordance with manufacturer's specifications (Approximately 95% DRE)
Stroehmann Bakeries, Inc. (Sayre, PA)	Const Approval No. 08-001B State Only Permit No. 08-00019	8/14/01 1/10/03	Bakery Oven	Presumptive VOC RACT: install, maintain, and operate catalytic oxidizer in accordance with manufacturer's specifications (Approximately 95% DRE)
George Weston Bakeries, Inc. (Arnold Foods, Co,) (Greenwich, CT)	Const/Op Permit No. 067-0038 Permit Modification No. 067-0038	2/2/96 7/04	Bakery Oven	Catalytic oxidizer with 95% DRE to satisfy VOC RACT

(d) The South Coast Air Quality Management District (SCAQMD) of the State of California regulates commercial bakery ovens under the provisions of Rule 1153 - Commercial Bakery Ovens (Adopted January 4, 1991, Amended January 13, 1995). Pursuant to SCAQMD Rule 1153(c)(2), no person shall operate a new bakery oven unless VOC emissions are reduced by at least 95 percent by weight (as carbon) if the uncontrolled average daily VOC emissions are 50 pounds or more.

(e) Since the primary VOC emitted from the new bread oven is ethanol, BACT determinations performed by IDEM for ethanol emissions from ethanol plants were reviewed. Recent permits issued by IDEM for ethanol plants (F053-21057-00062 and F017-21536-00023) have selected BACT as follows:

	BACT Overall VOC Control Efficiency or VOC Outlet Concentration Limit	
Process	**F053-21057-00062**	**F017-21536-00023**
Fermentation Process	98% or 20 ppmv	98% or 20 ppmv
Distillation and Evaporation	98% or 20 ppmv	98% or 10 ppmv
Distiller's Dried Grains & Solubles (DDGS) Drying	98% or 10 ppmv	98% or 10 ppmv

In comparing a bakery oven to each of the above processes at an ethanol plant, there are major differences that affect the control efficiency. An ethanol plant is a chemical plant, where each of the process stream flow rates and VOC loadings are typically at a steady state process condition. A typical bakery oven experiences multiple variations of flow rate, formulations, water content, VOC loading, and temperature, resulting in a lower and varying VOC control efficiency for a control technology. Based this rationale and the information reviewed for this BACT determination, IDEM has determined that the remaining technically feasible options can achieve a 95% overall control efficiency for VOC emissions from the bread oven on a consistent basis under normal operational conditions.

(f) Allen Foods, Inc. provided IDEM, OAQ with a thorough economic analysis of the technically feasible control options. The analysis estimated the cost of the VOC control equipment, including the initial capital cost of the various components intrinsic to the complete system, and the estimated annual operating costs. The basic equipment costs were obtained from vendor's quoted prices. Annualized costs were developed based on information from the vendors and a literature review. The analysis assumed an interest rate of 6% and an equipment life of 10 years. The basis of cost effectiveness, used to evaluate the control options, is the ratio of the annualized cost to the amount of VOC (tons) removed per year. A summary of the cost figures determined in the analysis is provided in the table below.

Type of Cost		Catalytic Oxidizer	Wet Packed Bed Scrubber	Biofilter
CAPITAL COSTS				
Direct Capital Costs				
1.	Equipment & Auxiliaries, Instruments/Controls, Site Preparation, Foundations/Supports, Electrical, Piping, Insulation, Painting (including delivery, installation, and taxes)	$606,960	$353,160	$500,580
	Total Direct Capital Costs (Purchased + Installation)	**$606,960**	**$353,160**	**$500,580**
Indirect Costs				
2.	Engineering Service	$3,456	$32,400	$21,600
3.	Start-Up	$16,200	$16,200	$16,200
4.	Contingency	$125,323	$80,352	$107,676
	Total Indirect Costs	**$144,979**	**$128,952**	**$145,476**
	Total Installed Capital Cost (Direct + Indirect)	**$751,939**	**$482,112**	**$646,056**
ANNUALIZED COSTS				
Direct Operating Costs (Annualized)				
5.	Fuel Costs (natural gas)	$29,434	$0	$0
6.	Electricity	$27,156	$7,972	$8,760
7.	Public Water and Sewer Service	$0	$78,840	$94,608
8.	Waste Water Treatment Plant Organic Load Surcharge	$0	$96,579	$69,905
9.	Operator Labor	$5,475	$5,475	$2,738
10.	Supervisor Labor	$821	$821	$411
11.	Maintenance Labor	$5,475	$5,475	$2,738
12.	Maintenance Materials	$5,475	$5,475	$2,738
13.	Maintenance Supervisor	$821	$821	$411
14.	System Regeneration/Parts Replacement/Feed Inputs	$7,622	$4,893	$4,717
	Total Direct Operating Costs	**$82,279**	**$206,351**	**$187,026**
Indirect Operating Costs (Annualized)				
15.	Overhead	$10,841	$10,841	$5,420
16.	Administrative Costs	$15,039	$9,642	$12,921
17.	Property Taxes	$7,519	$4,821	$6,461
18.	Insurance	$7,519	$4,821	$6,461
	Total Indirect Operating Costs	**$40,918**	**$30,125**	**$31,263**
	Total Operating Costs (Direct + Indirect)	**$123,197**	**$236,476**	**$218,289**
	Capital Recovery Cost	**$101,532**	**$64,801**	**$87,201**
	Total Annualized Costs	**$224,729**	**$301,277**	**$305,490**
	Maximum Anticipated VOC Emissions (tons/year)	110.71	110.71	110.71
	Control Efficiency (%)	95.0%	95.0%	95.0%
	VOC Removed at Control Efficiency (tons/year)	105.17	105.17	105.17
	Cost Effectiveness ($/ton VOC removed)	**$2,137**	**$2,865**	**$2,905**

* Cost figures for thermal oxidation not included. Allen Foods Inc., determined that catalytic oxidation is more economic than thermal oxidation based on vendor information and ACT Document EPA-453/R-92-017.

** The uncontrolled PTE of VOCs for the bread oven (028) was calculated to be 200.27 tons of VOCs per year using a VOC emission factor of 6.35 pounds of VOCs per ton of bread produced for the worst case bread to be produced at the source, at a maximum bread production rate of 160 loaves per minute (7.2 tons of bread per hour), and assuming 8,760 hours of operation per year. For this BACT determination, the baseline VOC emission rate for the bread oven corresponds to the realistic upper-bound uncontrolled emission rate of 110.71 tons of VOCs per year, based on calculations provided in the application by the source. This baseline emission rate was calculated by summing the VOC emissions from all anticipated breads to be produced in the bread oven, at a maximum bread production rate of 160 loaves per minute (7.2 tons of bread per hour), and assuming 8,760 hours of operation per year.

Step 5 – Select BACT

Based on the information presented above:

(a) Catalytic oxidizer is the most cost-effective technically feasible control option for controlling VOCs from the bread oven and is the primary control technology used throughout the country for controlling VOC emissions from large bakery ovens. The most stringent BACT requirement for a large bakery oven was catalytic oxidation with an overall VOC control efficiency of at least 95%.

(b) Wet packed bed scrubber was not selected as BACT for the bread oven, since it would require substantial amounts of water requiring treatment at a wastewater treatment plant (WWTP). Although the scrubber could control VOC emissions from the bread oven at a control efficiency of 95%, VOCs could potentially volatilize from the wastewater during the transference or conveyance to the WWTP, as well as, during treatment at the WWTP. To avoid this problem, the sewage system and WWTP would need to be designed to minimize the volatilization of VOCs or capture and control VOCs emitted the ambient air.

(c) Biofiltration was not selected as BACT for the bread oven, since cooling of the hot oven exhaust prior to the biofilter could result in fat and oil condensation problems and the biofilter beds would require significant amount of space at the bakery.
(EPA-453/R-92-017)

IDEM, OAQ has determined that the following requirements represent BACT for the new bread oven (028) at the source:

(a) The VOC emissions from the bread oven (028) shall be controlled by a catalytic oxidizer.

(b) The overall VOC control efficiency for the catalytic oxidizer (including the capture efficiency and destruction efficiency) shall be at least 95%, or the VOC outlet concentration shall not exceed 10 ppmv.

(c) The VOC emissions from the bread oven (028) shall not exceed 2.29 pounds per hour.

The above emission limit was calculated as follows:

Emission Limit (lbs/hr) = PTE (tons/yr)*(1 - Control Efficiency)*(2000 lbs/ton)*(1 yr/8760 hrs)

Emission Limit (lbs/hr) = (200.27 tons/yr)*(1 - 0.95)*(2000 lbs/ton)*(1 yr/8760 hrs) = 2.29 lbs/hr

Appendix A: Emissions Calculations
Emission Summary

Company Name: Allen Foods, Inc.
Address City IN Zip: 53075 Frederic Drive, Elkhart, IN 46514
Permit Number: 039-22633-00643
Plt ID: 039-00643
Reviewer: Nathan C. Bell
Date: May 5, 2005

	Uncontrolled/Unlimited Potential Emissions (tons/year)					
	Emissions Generating Activity					
Category	Pollutant	Natural Gas Combustion	Dry Ingredient Storage and Conveying	English Muffin Ovens	Bread Oven	**TOTAL**
Criteria Pollutants	PM	0.32	295.21			295.54
	PM10	1.30	103.42			104.72
	SO2	0.10				0.10
	NOx	17.08				17.08
	VOC	0.94		18.19	200.27	219.40
	CO	14.35				14.35
Hazardous Air Pollutants	Benzene	3.6E-04				3.6E-04
	Dichlorobenzene	2.0E-04				2.0E-04
	Formaldehyde	0.01				0.01
	n-Hexane	0.31				0.31
	Toluene	5.8E-04				5.8E-04
	Lead	8.5E-05				8.5E-05
	Cadmium	1.9E-04				1.9E-04
	Chromium	2.4E-04				2.4E-04
	Manganese	6.5E-05				6.5E-05
	Nickel	3.6E-04				3.6E-04
	Acetaldehyde			0.55	6.01	6.55
	Totals	**0.32**	**0**	**0.55**	**6.01**	**6.88**
					Worse Case HAP	**6.55**

Total emissions based on rated capacity at 8,760 hours/year.

	Limited Potential Emissions (tons/year)					
	Emissions Generating Activity					
Category	Pollutant	Natural Gas Combustion	Dry Ingredient Storage and Conveying	English Muffin Ovens	Bread Oven	**TOTAL**
Criteria Pollutants	PM	0.32	29.52			29.85
	PM10	1.30	10.34			11.64
	SO2	0.10				0.10
	NOx	17.08				17.08
	VOC	0.94		18.19	10.01	29.15
	CO	14.35				14.35
Hazardous Air Pollutants	Benzene	3.6E-04				3.6E-04
	Dichlorobenzene	2.0E-04				2.0E-04
	Formaldehyde	0.01				0.01
	n-Hexane	0.31				0.31
	Toluene	5.8E-04				5.8E-04
	Lead	8.5E-05				8.5E-05
	Cadmium	1.9E-04				1.9E-04
	Chromium	2.4E-04				2.4E-04
	Manganese	6.5E-05				6.5E-05
	Nickel	3.6E-04				3.6E-04
	Acetaldehyde			0.55	0.30	0.85
	Totals	**0.32**	**0**	**0.55**	**0.30**	**1.17**
					Worse Case HAP	**0.85**

Total emissions based on rated capacity at 8,760 hours/year.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: **Allen Foods, Inc.**
Address City IN Zip: **53075 Frederic Drive, Elkhart, IN 46514**
Permit Number: **039-22633-00643**
Plt ID: **039-00643**
Reviewer: **Nathan C. Bell**
Date: **May 5, 2005**

				Pollutant	PM*	PM10*	SO2	NOx**	VOC	CO
				Emission Factor (lb/MMCF)	1.9	7.6	0.6	100	5.5	84.0
Emission Unit	Number of Units	Unit Heat Input Capacity MMBtu/hr	Combined Total Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission tons/yr PM*	PM10*	SO2	NOx**	VOC	CO
English Muffin Oven (001)	1	2.850	2.85	24.97	0.024	0.095	0.007	1.248	0.069	1.049
Auxiliary Boiler (002)	1	1.000	1.00	8.76	0.008	0.033	0.003	0.438	0.024	0.368
Process Water Heater (003)	1	0.540	0.54	4.73	0.004	0.018	0.001	0.237	0.013	0.199
Domestic Water Heater (004)	1	0.300	0.30	2.63	0.002	0.010	0.001	0.131	0.007	0.110
Space Heaters (005 through 009)	5	3.500	17.50	153.30	0.146	0.583	0.046	7.665	0.422	6.439
Space Heaters (010 through 020)	11	0.120	1.32	11.56	0.011	0.044	0.003	0.578	0.032	0.486
English Muffin Oven (027)	1	2.400	2.40	21.02	0.020	0.080	0.006	1.051	0.058	0.883
Bread Oven (028)	1	10.080	10.08	88.30	0.084	0.336	0.026	4.415	0.243	3.709
Catalytic Oxidizer (029)	1	3.000	3.00	26.28	0.025	0.100	0.008	1.314	0.072	1.104
Totals	**23**		**38.99**		**0.324**	**1.298**	**0.102**	**17.078**	**0.939**	**14.345**

Pollutant	Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
Emission Factor (lb/MMCF)	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Emission Unit	Potential Emission tons/yr Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
English Muffin Oven (001)	2.6E-05	1.5E-05	9.4E-04	0.022	4.2E-05	6.2E-06	1.4E-05	1.7E-05	4.7E-06	2.6E-05
Auxiliary Boiler (002)	9.2E-06	5.3E-06	3.3E-04	0.008	1.5E-05	2.2E-06	4.8E-06	6.1E-06	1.7E-06	9.2E-06
Process Water Heater (003)	5.0E-06	2.8E-06	1.8E-04	0.004	8.0E-06	1.2E-06	2.6E-06	3.3E-06	9.0E-07	5.0E-06
Domestic Water Heater (004)	2.8E-06	1.6E-06	9.9E-05	0.002	4.5E-06	6.6E-07	1.4E-06	1.8E-06	5.0E-07	2.8E-06
Space Heaters (005 through 009)	1.6E-04	9.2E-05	5.7E-03	0.138	2.6E-04	3.8E-05	8.4E-05	1.1E-04	2.9E-05	1.6E-04
Space Heaters (010 through 020)	1.2E-05	6.9E-06	4.3E-04	0.010	2.0E-05	2.9E-06	6.4E-06	8.1E-06	2.2E-06	1.2E-05
English Muffin Oven (027)	2.2E-05	1.3E-05	7.9E-04	0.019	3.6E-05	5.3E-06	1.2E-05	1.5E-05	4.0E-06	2.2E-05
Bread Oven (028)	9.3E-05	5.3E-05	3.3E-03	0.079	1.5E-04	2.2E-05	4.9E-05	6.2E-05	1.7E-05	9.3E-05
Catalytic Oxidizer (029)	2.8E-05	1.6E-05	9.9E-04	0.024	4.5E-05	6.6E-06	1.4E-05	1.8E-05	5.0E-06	2.8E-05
Totals	**3.6E-04**	**2.0E-04**	**1.3E-02**	**0.307**	**5.8E-04**	**8.5E-05**	**1.9E-04**	**2.4E-04**	**6.5E-05**	**3.6E-04**

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32
The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Methodology
Potential Throughput (MMCF) = Combined Total Heat Input Capacity (MMBtu/hr) * 8,760 hrs/yr * 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) * Emission Factor (lb/MMCF) / 2,000 lb/ton
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu, MMCF = 1,000,000 Cubic Feet of Gas

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
SO2 = Sulfur Dioxide
NOx = Nitrous Oxides
VOC - Volatile Organic Compounds
CO = Carbon Monoxide
DCB = Dichlorobenzene
Pb = Lead
Cd = Cadmium
Cr = Chromium
Mn = Manganese
Ni = Nickel

Appendix A: Emissions Calculations
Emissions from Dry Ingredient Storage and Conveying

Company Name: Allen Foods, Inc.
Address City IN Zip: 53075 Frederic Drive, Elkhart, IN 46514
Permit Number: 039-22633-00643
Plt ID: 039-00643
Reviewer: Nathan C. Bell
Date: May 5, 2005

The uncontrolled potential emissions of particulate from dry ingredient storage and conveying before controls are estimated using AP-42 Table 11.12-2 emission factors for the uncontrolled truck unloading of cement supplement to elevated storage silo (pneumatic)

Emission Factor (lbs/ton)*	
PM	PM10
3.14	1.10

Filter Unit Control Efficiency	
PM	PM10
99.9%	99.9%

Potential to Emit (PTE) of Particulate (PM and PM10)

Emission Unit	Maximum Ingredient Throughput (lbs/hr)**	Maximum Ingredient Throughput (tons/hr)**	Uncontrolled PTE of PM (lbs/hour)	Uncontrolled PTE of PM10 (lbs/hour)	Uncontrolled PTE of PM (tons/yr)	Uncontrolled PTE of PM10 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Limited Throughput (tons/yr)	Limited PTE of PM (lbs/ton)	Limited PTE of PM10 (lbs/ton)	Limited PTE of PM (tons/yr)	Limited PTE of PM10 (tons/yr)
7 Dry Ingredient Storage Silos (021, 022, 030, 031, 032, 033, and 034)	14310.0	7.16	22.47	7.87	98.40	34.47	9.8E-02	3.4E-02	62678	0.314	0.11	9.84	3.45
2 Dry Ingredient Use Bins (035 and 036) and 1 Dusting Flour Use Bin (037)	14310.0	7.16	22.47	7.87	98.40	34.47	9.8E-02	3.4E-02	62678	0.314	0.11	9.84	3.45
7 Scale Hoppers (038, 039, 040, 041, 042, 043, 044) and 2 Dusting Flour Hoppers (045 and 046)	14310.0	7.16	22.47	7.87	98.40	34.47	9.8E-02	3.4E-02	62678	0.314	0.11	9.84	3.45
Methodology				**Totals**	**295.2**	**103.4**	**0.295**	**0.103**				**29.52**	**10.34**

* Emission Factors from AP-42 Table 11.12-2 for uncontrolled truck unloading of cement supplement to elevated storage silo (pneumatic)
**Maximum ingredient throughput of 14310 lbs/hr based on maximum batch production of bread using the 1 bread line and 2 muffin line. The maximum batch production rate of the 1 bread line is 160 loaves/min (7.2 tons of bread/hr) and the maximum batch production rate of each muffin line is 504 pieces/min (2.1 tons of muffins/hr)
Maximum Hourly Throughput (tons/hr) = [Maximum Hourly Throughput (lbs/hr)] / [2000 lbs/ton]
Uncontrolled PTE of PM or PM10 (lbs/hour) = [Maximum Hourly Throughput (tons/hr)] * [Emission Factor (lbs/ton)]
Uncontrolled PTE of PM or PM10 (tons/year) = [Uncontrolled PTE of PM or PM10 (lbs/hour)] * [8760 hours/year)] / [2000 lbs/ton]
Controlled PTE of PM or PM10 (tons/year) = [Uncontrolled PTE of PM or PM10 (tons/year)] *[1 - Control Efficiency]

Compliance with 326 IAC 6-3-2

Emission Unit Type	Maximum Batch Filling Rate (lbs/min)*	Maximum Batch Filling Rate (lbs/hr)	Maximum Batch Filling Rate (tons/hr)	326 IAC 6-3-2 Allowable PM Emission Rate (lbs/hr)
Dry Ingredient Storage Silo (each of 7 silos)	556.0	33360.0	16.68	27.0
Dry Ingredient Use Bin (each of 2 use bins)	325.0	19500.0	9.75	18.9
Dusting Flour Use Bin	325.0	19500.0	9.75	18.9
Muffin Scale Hopper (each of 4 Muffin Scale Hoppers)	250.0	15000.0	7.50	15.8
Bread Scale Hopper (each of 3 Bread Scale Hoppers)	250.0	15000.0	7.50	15.8

*Each dry ingredient storage silo has a maximum batch filling rate of 556 lbs/minute, based on truck unloading of 50,000 lb of flour over 90 minutes.
*Each use bin has a maximum batch filling rate of 325 lbs/minute.
*Each scale hopper has a maximum batch filling rate of 250 lbs/minute.
The use of the filter units will ensure compliance with each of the limits above.

Appendix A: Emissions Calculations
English Muffin Ovens (001 and 027)

Company Name: Allen Foods, Inc.
Address City IN Zip: 53075 Frederic Drive, Elkhart, IN 46514
Permit Number: 039-22633-00643
Plt ID: 039-00643
Reviewer: Nathan C. Bell
Date: May 5, 2005

Potential to Emit (PTE) of Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs)

Emission Unit	Maximum Throughput (pieces/min)*	Unit Weight (oz/piece)*	Maximum Throughput (tons/hr)	VOC Emission Factor (lbs/ton)**	Uncontrolled PTE of VOCs (lbs/hour)	Uncontrolled PTE of VOCs (tons/year)	Acetaldehyde Content of VOCs (% by weight)***	Uncontrolled PTE of HAPs (acetaldehyde) (tons/year)
English Muffin Oven (001)	504	2.22	2.10	0.99	2.08	9.10	3.0%	0.27
English Muffin Oven (027)	504	2.22	2.10	0.99	2.08	9.10	3.0%	0.27
				Totals	**4.15**	**18.19**		**0.55**

Methodology

*Provided by Allen Foods, Inc.

**Provided by Allen Foods, Inc., based on stack testing at the George Weston Bakeries, Greenwich, CT plant on 8/16/05 of simlar oven producing the same bread

***VOCs emitted during fermentation (leavening) assumed to be 97% ethanol and 3% acetaldehyde (VOC/HAP), based on the following document and supporting information:

1. "Alternative Control Technology Document for Bakery Oven Emissions" (EPA 453/R-92-017, December 1992)
2. Henderson, D.C., 1977, "Commercial Bakeries as a Major Source of Reactive Volatile Organic Gases", U.S. EPA, Region XI Surveillance and Analysis Division

Maximum Throughput (tons/hr) = [Maximum Throughput (pieces/min)] * [Unit Weight (oz/piece)] * [60 min/hr] * [lb/16 oz] * [ton/2000 lb]

Uncontrolled PTE of VOCs (lbs/hour) = [Maximum Hourly Throughput (tons/hr)] * [Emission Factor (lbs/ton)]

Uncontrolled PTE of VOCs (tons/year) = [PTE of VOCs or HAPs (lbs/hour)] * [8760 hours/year)] / [2000 lbs/ton]

Uncontrolled PTE of HAPs (tons/year) = [PTE of VOCs (tons/year)] * [HAP content of VOC (%)] / [100%]

Appendix A: Emission Calculations
Bread Oven

Company Name: Allen Foods, Inc.
Address City IN Zip: 53075 Frederic Drive, Elkhart, IN 46514
Permit Number: 039-22633-00643
Plt ID: 039-00643
Reviewer: Nathan C. Bell
Date: May 5, 2005

Potential Emissions of Volatile Organic Compounds (VOCs)

AP-42 Section 9.9.6:

VOC = 0.95Yi + 0.195ti - 0.51S - 0.86ts + 1.90

For worst case bread product*:

Yi =	4.5	= Initial baker's percent of yeast to the nearest tenth
ti =	0.9	= total yeast action time in hours to the nearest tenth
S =	0.0	= final (spike) baker's percent of yeast to the nearest tenth
ts =	0.0	= spiking time in hours to the nearest tenth
Worst case VOC Emission Factor =	**6.35**	(lbs VOC/ton of baked bread)

Potential to Emit (PTE) of Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs)

Emission Unit	Maximum Throughput (loaves/min)*	Unit Weight (oz/loaf)*	Maximum Throughput (tons/hr)	VOC Emission Factor (lbs/ton)*	Acetaldehyde Content of VOCs (% by weight)**	Uncontrolled PTE of VOCs (lbs/hour)	Uncontrolled PTE of VOCs (tons/year)	Uncontrolled PTE of HAPs (acetaldehyde) (tons/year)	Overall Control Efficiency of Catalytic Oxidizer	Controlled PTE of VOCs (tons/year)	Controlled PTE of HAPs (acetaldehyde) (tons/year)
Bread Oven (028)	160	24	7.20	6.35	3.0%	45.72	200.27	6.01	95.0%	10.01	0.30

Methodology

*VOC emission factor for worst case bread product as provided by Allen Foods, Inc.

**VOCs emitted during fermentation (leavening) assumed to be 97% ethanol and 3% acetaldehyde (VOC/HAP), based on the following document and supporting information:

1. "Alternative Control Technology Document for Bakery Oven Emissions" (EPA 453/R-92-017, December 1992)
2. Henderson, D.C., 1977, "Commercial Bakeries as a Major Source of Reactive Volatile Organic Gases", U.S. EPA, Region XI Surveillance and Analysis Division

Maximum Throughput (tons/hr) = [Maximum Throughput (loaves/min)] * [Unit Weight (oz/loaf)] * [60 min/hr] * [lb/16 oz] * [ton/2000 lb]
Uncontrolled PTE of VOCs (lbs/hour) = [Maximum Hourly Throughput (tons/hr)] * [Emission Factor (lbs/ton)]
Uncontrolled PTE of VOCs (tons/year) = [PTE of VOCs (lbs/hour)] * [8760 hours/year)] / [2000 lbs/ton]
Uncontrolled PTE of HAPs (tons/year) = [PTE of VOCs (tons/year)] * [HAP content of VOC (%)] / [100%]
Controlled PTE = Uncontrolled PTE * (1 - Control Efficiency)

Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved and Paved Roads

Company Name: **Allen Foods, Inc.**
Address City IN Zip: **53075 Frederic Drive, Elkhart, IN 46514**
Permit Number: **039-22633-00643**
Plt ID: **039-00643**
Reviewer: **Nathan C. Bell**
Date: **May 5, 2005**

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (12/2003)

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight of Vehicle and Load (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)
Personal Car/Truck	60	2	120	3	360	450	0.085	10.2
Semitrailer Truck (ingredients in)	5	1	5	10	50	450	0.085	0.4
Semitrailer Truck (product out)	24	1	24	15	360	450	0.085	2.0
Total			**149**		**770**			**12.7**

Average Vehicle Weight Per Trip = 5.2 tons/trip
Average Miles Per Trip = 0.09 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL/2)^0.65 * (W/3)^1.5 - C] (Equation 1 from AP-42 13.2.1)

	PM	PM10	
where k =	0.082	0.016	lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)
W =	5.2	5.2	tons = average vehicle weight (provided by source)
C =	0.00047	0.00047	lb/mi = emission factor for vehicle exhaust, brake wear, and tire wear (AP-42 Table 13.2.1-2
sL =	1.4	1.4	g/m^2 = Ubitiguous Silt Loading Values of typical paved roads (averaged for whole year

sL (baseline) = 0.6 g/m^2 for 12 months (see AP-42 Table 13.2.1-3)
sL (winter) = 2.4 g/m^2 for 4 months (see AP-42 Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)]
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]

where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2
N = 365 days per year

	PM	PM10	
Unmitigated Emission Factor, Ef =	0.15	0.03	lb/mile
Mitigated Emission Factor, Eext =	0.13	0.03	lb/mile

Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)
Personal Car/Truck	0.27	0.05	0.250	0.048
Semitrailer Truck (ingredients in)	0.01	0.00	0.010	0.002
Semitrailer Truck (product out)	0.05	0.01	0.050	0.010
Totals	**0.34**	**0.07**	**0.31**	**0.06**