INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: November 17, 2008

RE: New Horizons Baking Company / 151-26750-00060

FROM: Matthew Stuckey, Branch 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, Suite N 501E, 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.dot12/03/07

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Minor Source Operating Permit Renewal
OFFICE OF AIR QUALITY

New Horizons Baking Company
700 W. Water Street
Fremont, Indiana 46737

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

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

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 MSOP under 326 IAC 2-6.1.

Operation Permit No.: M151-26750-00060	
Issued by:	Issuance Date:
Alfred C. Dumaual, Ph. D., Section Chief Permits Branch Office of Air Quality	Expiration Date:

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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 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary bread baking plant.

Source Address:	700 W. Water Street, Fremont, Indiana 46737
Mailing Address:	700 W. Water Street, Fremont, Indiana 46737
General Source Phone Number:	(260) 495-7055
SIC Code:	2051
County Location:	Steuben
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) natural gas-fired bun oven, identified as Unit A, with a maximum heat input of 4.60 million British thermal units (MMBtu) per hour and a maximum baking rate of 7,700 pounds of bread per hour, constructed in 1979, and exhausting to Stack A.

(b) One (1) natural gas-fired muffin griddle, identified as Unit B, with a maximum heat input of 5.96 MMBtu per hour and a maximum baking rate of 4,200 pounds of bread per hour, constructed in 1983 and modified in 2008.

(c) Two (2) flour storage silos, identified as Unit C1 and Unit C2, each with a maximum capacity of 60 tons of flour and a maximum throughput rate of 6.25 tons of flour per hour, equipped with a pneumatic conveyance system, using fabric filters as control, and constructed in 1979.

(d) One (1) natural gas-fired Hurst boiler, identified as Unit D, with a maximum heat input of 2.60 MMBtu per hour, exhausting to Stack D, and constructed in 1979.

(e) One (1) natural gas-fired Kewannee boiler, identified as Unit E, with a maximum heat input of 1.80 MMBtu per hour, exhausting to Stack E, and constructed in 1996.

(f) One (1) 5 KVA emergency generator, identified as Unit G, burning natural gas, exhausting to Stack G, and constructed in 1983.

(g) Six (6) natural gas-fired space heaters, identified as F1 through F6, each with a maximum heat input of 0.10 MMBtu per hour, and installed in 1979.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

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 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, M151-26750-00060, is issued for a fixed term of ten (10) 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.3 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.4 Enforceability

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.5 Severability

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.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

(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.8 Certification

(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.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

(c) The notification 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.

B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) 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.

(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.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to M151-26750-00060 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.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

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 ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.13 Permit Renewal [326 IAC 2-6.1-7]

(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 2-6.1-7. Such information shall be included in the application for each emission unit at this source. 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

(1) Submitted at least ninety (90) days 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 2-6.1 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.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 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
MC 61-53 IGCN 1003
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 shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.15 Source Modification Requirement

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

B.16 Inspection and Entry
[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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 permitted 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.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 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
MC 61-53 IGCN 1003
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 notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.18 Annual Fee Payment [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.

(b) 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.19 Credible Evidence [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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(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 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

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 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
MC 61-52 IGCN 1003
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 Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

C.8 Performance Testing [326 IAC 3-6]

(a) 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
MC 61-53 IGCN 1003
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.9 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 2-6.1-5(a)(2)]

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 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.12 Instrument Specifications [326 IAC 2-1.1-11]

(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

C.13 Response to Excursions or Exceedances

(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; and/or

(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.14 Actions Related to Noncompliance Demonstrated by a Stack Test

(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 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 2-6.1-5(a)(2)]

C.15 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]

(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.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) 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.

(c) 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).

(d) 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.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) natural gas-fired bun oven, identified as Unit A, with a maximum heat input of 4.60 million British thermal units (MMBtu) per hour and a maximum baking rate of 7,700 pounds of bread per hour, constructed in 1979, and exhausting to Stack A.

(b) One (1) natural gas-fired muffin griddle, identified as Unit B, with a maximum heat input of 5.96 MMBtu per hour and a maximum baking rate of 4,200 pounds of bread per hour, constructed in 1983 and modified in 2008.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to Minor Permit Revision 151-26448-00060, issued on June 26, 2008, the potential to emit VOC from the muffin griddle, identified as Unit B, shall be less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with this limit renders the requirements of 326 IAC 8-1-6 (New facilities; General Reduction Requirements) not applicable.

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit is requried for the bun oven and muffin griddle facilities.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.3 VOC Emissions

Compliance with Condition D.1.1 shall be determined within 30 days of the end of each month. For a particular month, this shall be based on the total volatile organic compound emitted for that month added to the previous eleven (11)-month total VOC emitted so as to arrive at VOC emissions for the most recent twelve (12) consecutive month period. The VOC emissions for a month shall be determined using the following equation:

$$VOC_i = \sum_{i=1}^{n} \frac{E_i B_i}{2000\,\text{lbs/ton}}$$

where:

VOC_i = The total VOC emissions per month from the muffin griddle for all bread types;
B_i = The amount of bread of type i produced during a given month (tons/month);
E_i = The VOC emission factor for type i bread (lb of VOC/ton of baked bread); and
n = The total number of bread types produced during a given month.

The VOC emission factor for each type of bread made in the muffin griddle shall be calculated using the following equation:

$$E_i = 0.40425 + 0.444585\,[(Y_i \times t_i) + (S \times t_s)]$$

where:

E_i = The VOC emission factor for type i bread (lb of VOC/ton of baked bread);
Y_i = The baker's percent of yeast in sponge;
t_i = The total time of fermentation in hours;
S = The baker's percent yeast added to dough; and
t_s = The proof time plus the floor time in hours.

Record Keeping and Reporting Requirement

D.1.4 Record Keeping Requirements

(a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emissions limit established in Condition D.1.1.

(1) The dates of the compliance period:

(2) The amount and type of each bread produced during each month;

(3) The VOC emission factor for each type of bread made during each month and information necessary to calculate the VOC emission factor for each type of bread, including:

(A) The baker's percent of yeast in sponge;

(B) The total time of fermentation in hours;

(C) The baker's percent yeast added to dough; and

(D) The proof time plus the floor time in hours.

(4) The total weight of VOCs emitted for each month.

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

D.1.5 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 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.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

(c) Two (2) flour storage silos (identified as Unit C1 and C2), each with a maximum capacity of 60 tons and a maximum throughput rate of 6.25 tons of flour per hour, equipped with a pneumatic conveyance system, using fabric filters as control. These units were constructed in 1979.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emissions from the two (2) flour storage silos shall each not exceed the following:

Emission Unit	Process Weight Rate (tons/hour)	PM Emission Rate (lb/hr)
Unit C1	6.25	13.99
Unit C2	6.25	13.99

Interpolation of the data for the process weight rate 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

Compliance Determination Requirements

D.2.2 Particulate Control

In order to comply with Conditions D.2.1, the dry filters used for particulate control shall be in operation and control emissions from the two (2) flour storage silos at all times when the two (2) flour storage silos are in operation.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

(d) One (1) natural gas fired Hurst boiler (identified as Unit D), with a maximum heat input capacity of 2.60 MMBtu per hour and exhausting at Stack D. This unit was constructed in 1979.

(e) One (1) natural gas fired Kewanee boiler (identified as Unit E), with a maximum heat input capacity of 1.80 MMBtu per hour and exhausting at Stack E. This unit was constructed in 1996.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.3.1 Particulate [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3(e) (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the 2.60 MMBtu per hour Hurst boiler shall not exceed 0.6 pounds of particulate matter per MMBtu heat input.

D.3.2 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating), emissions from the 1.80 MMBtu per boiler shall in no case exceed 0.6 pounds of particulate matter per million British thermal units heat input

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

MINOR SOURCE OPERATING PERMIT (MSOP)
CERTIFICATION

Source Name: New Horizons Baking Company
Source Address: 700 W. Water Street, Fremont, Indiana 46737
Mailing Address: 700 W. Water Street, Fremont, Indiana 46373
MSOP Permit No.: M151-26750-00060

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 DATA SECTION

MSOP Quarterly Report

Source Name: New Horizons Baking Company
Source Address: 700 W. Water Street, Fremont, Indiana 46737
Mailing Address: 700 W. Water Street, Fremont, Indiana 46737
MSOP No.: 151-26750-00060
Facility: The muffin griddle (identified as Unit B)
Parameter: Volatile Organic Compound (VOC) Emissions
Limit: Less than 25.0 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The VOC emissions for a month shall be determined using the equations contained in Condition D.1.3

YEAR:_____

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by:_____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	New Horizons Baking Company
Address:	700 W. Water Street
City:	Fremont, Indiana 46737
Phone #:	(260) 495-7055
MSOP #:	M151-26750-00060

I hereby certify that New Horizons Baking Company is : ☐ still in operation.
☐ no longer in operation.

I hereby certify that New Horizons Baking Company is : ☐ in compliance with the requirements of MSOP M151-26750-00060.
☐ not in compliance with the requirements of MSOP M151-26750-00060.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-6865

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____
*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit Renewal

Source Background and Description

Source Name:	**New Horizons Baking Company**
Source Location:	**700 W. Water Street, Fremont, Indiana 46737**
County:	**Steuben**
SIC Code:	**2051**
Permit Renewal No.:	**M151-26750-00060**
Permit Reviewer:	**Anne-Marie C. Hart**

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from New Horizons Baking Company relating to the operation of a bread baking plant.

History

On July 14, 2008, New Horizons Baking Company submitted an application to the OAQ requesting to renew its operating permit. New Horizons Baking Company was issued a Minor Source Operating Permit (M151-17821-00060) on October 16, 2003.

Permitted Emission Units and Pollution Control Equipment

(a) One (1) natural gas-fired bun oven, identified as Unit A, with a maximum heat input of 4.60 million British thermal units (MMBtu) per hour and a maximum baking rate of 7,700 pounds of bread per hour, constructed in 1979, and exhausting to Stack A.

(b) One (1) natural gas-fired muffin griddle, identified as Unit B, with a maximum heat input of 5.96 MMBtu per hour and a maximum baking rate of 4,200 pounds of bread per hour, constructed in 1983 and modified in 2008.

(c) Two (2) flour storage silos, identified as Unit C1 and Unit C2, each with a maximum capacity of 60 tons of flour and a maximum throughput rate of 6.25 tons of flour per hour, equipped with a pneumatic conveyance system, using fabric filters as control, and constructed in 1979.

(d) One (1) natural gas-fired Hurst boiler, identified as Unit D, with a maximum heat input of 2.60 MMBtu per hour, exhausting to Stack D, and constructed in 1979.

(e) One (1) natural gas-fired Kewannee boiler, identified as Unit E, with a maximum heat input of 1.80 MMBtu per hour, exhausting to Stack E, and constructed in 1996.

(f) One (1) 5 KVA emergency generator, identified as Unit G, burning natural gas, exhausting to Stack G, and constructed in 1983.

(g) Six (6) natural gas-fired space heaters, identified as F1 through F6, each with a maximum heat input of 0.10 MMBtu per hour, and installed in 1979.

There are no new units included in this renewal and the source has not removed any previously permitted units from the source.

Existing Approvals

Since the issuance of the MSOP M151-17821-00060 on October 16, 2003, the source has constructed or has been operating under the following approvals as well:

(a) Minor Permit Revision No. 151-26448-00060 issued on June 26, 2008.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this MSOP Renewal:

(a) All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations (Page 1 through 7).

County Attainment Status

The source is located in Steuben County

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5.	

(a) Ozone Standards

(1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.

(3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.

(4) 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 ozone. Steuben County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5
Steuben County has been classified as attainment for PM2.5. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM2.5 emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants
Steuben County has been classified as attainment or unclassifiable in Indiana for PM_{10}, CO, SO_2, NOx and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is still less than 100 tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Potential to Emit After Issuance

(a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

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

(b) The requirements of the New Source Performance Standard for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, are not included in the permit for the boilers identified as Unit D and Unit E. Construction of these units commenced prior to June 9, 1989.

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

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))
This source, constructed in 1979, is not one of the twenty-eight source categories and the potential to emit all criteria pollutants is less than 250 tons per year. Therefore, the source is not subject to 326 IAC 2-2.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of the bread baking plant will emit less than 10 tons per year of a single HAP and less than 25 tons per year of any combination of HAPs. Therefore, the source is not subject to 326 IAC 2-4.1.

326 IAC 2-6 (Emission Reporting)
This source is located in Steuben County and the potential to emit of each criteria pollutant is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

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 Exemptions), opacity shall meet the following, unless otherwise stated in the 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)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), 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 locted, in a manner that would violate 326 IAC 6-4.

State Rule Applicability – Individual Facilities

Unit A - Natural Gas-Fired Bun Oven and Unit B - Natural Gas-Fired Muffin Griddle

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

(a) The potential to emit VOC from the bun oven is greater than 25 tons per year. However, this unit was constructed prior to January 1, 1980, the applicability date for this rule. Therefore, Unit A is not subject to 326 IAC 8-1-6.

(b) The potential to emit VOC from the muffin griddle is greater than 25 tons per year. This unit was constructed after January 1, 1980 and is therefore subject to 326 IAC 8-1-6. Minor Permit Revision No. 151-26448-00060 (issued June 26, 2008) increased the heat capacity of the muffin griddle from 2.04 MMBtu per hour to 5.96 MMBtu per hour and increased the maximum baking rate of the muffin griddle from 3,300 pounds of bread per hour to 4,200 pounds of bread per hour. The increased capacities resulted in an increase in potential VOC emissions to greater than 25 tons per year. However, pursuant to Minor Permit Revision No. 151-26448-00060 (issued June 26, 2008), the source has agreed to limit the VOC emissions from the muffin griddle to less than 25 tons per year. Therefore, the muffin griddle is not subject to 326 IAC 8-1-6. The VOC emissions for a month shall be determined using the following equation:

$$VOC_i = \sum_{i=1}^{n} \frac{E_i B_i}{2000\,\text{lbs/ton}}$$

where:

VOC_i = The total VOC emissions per month from the muffin griddle for all bread types;
B_i = The amount of bread of type i produced during a given month (tons/month);
E_i = The VOC emission factor for type i bread (lb of VOC/ton of baked bread); and
n = The total number of bread types produced during a given month.

The VOC emission factor for each type of bread made in the muffin griddle shall be calculated using the following equation:

$$E_i = 0.40425 + 0.444585\,[(Y_i \times t_i) + (S \times t_s)]$$

where:

E_i = The VOC emission factor for type i bread (lb of VOC/ton of baked bread);
Y_i = The baker's percent of yeast in sponge;
t_i = The total time of fermentation in hours;
S = The baker's percent yeast added to dough; and
t_s = The proof time plus the floor time in hours.

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

The natural-gas fired bun oven and muffin griddle are sources of direct heating. Therefore, they are not subject to 326 IAC 6-2.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3, manufacturing process with potential emissions less than 0.551 pound per hour are exempt from the rule. The potential to emit particulate from Unit A and Unit B is less than 0.551 pound per hour. Therefore, Unit A and Unit B are not subject to the provisions of 326 IAC 6-3.

The exemption of Unit A and Unit B from the provisions of 326 IAC 6-3 supersede the particulate limits previously established in MSOP M151-17821-00060, issued October 16, 2003 of 10.10 pounds of particulate per hour from Unit A, and 5.73 pounds of particulate per hour from Unit B.

Two (2) Flour Storage Silos - Unit C1 and Unit C2

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The particulate from the two (2) flour silos identified as Unit C1 and Unit C2 shall be limited by the following:

Interpolation of the data for the process weight rate 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

Emission Unit	Process Weight Rate (tons/hour)	PM Emission Rate (lb/hr)
Unit C1	6.25	13.99
Unit C2	6.25	13.99

The fabric filters shall be in operation at all times the two (2) flour silos are in operation, in order to comply with this limit.

Boilers - Unit D and Unit E

326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-3, the particulate emissions from the 2.60 MMBtu per hour Hurst boiler (Unit D), which was existing and in operation before September 21, 1983 shall not exceed the particulate emission rate calculated using the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

Where

C = max ground level concentration (= 50 µm/m^3)
Pt = emission rate limit (lbs per MMBtu)
Q = total source heat input capacity (MMBtu per hour)
N = number of stacks = 1
a = plume rise factor = 0.67
h = stack height (ft) = 17 ft

The emission rate limit calculated using the equation above is:

$$Pt = \frac{50 \times 0.67 \times 17}{76.5 \times 2.60^{0.75} \times 1^{0.25}} = 3.64 \text{ lbs per MMBtu}$$

However, 326 IAC 6-2-3(e) states that boilers constructed after June 8, 1972 shall in no case exceed 0.6 pounds of particulate matter per MMBtu heat input. Since the 0.6 pounds particulate matter per MMBtu emission limit is less than the limit calculated using the equation, the 2.60 MMBtu per hour Hurst boiler shall be limited to 0.6 pounds of particulate matter per MMBtu heat input.

The potential to emit particulate matter from the 2.60 MMBtu per hour boiler is 0.002 pound per MMBtu. Therefore, the boiler is able to comply with this limit.

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-4(a), the particulate emissions from the 1.80 MMBtu per hour Kewanee boiler (Unit E), which was existing and in operation after September 21, 1983 shall be limited to the emission rate limit calculated using the equation below:

$$Pt = \frac{1.09}{Q^{0.26}}$$

The emission rate limit calculated using the equation above is:

$$Pt = \frac{1.09}{(2.60 + 1.80)^{0.26}} = 0.74 \text{ lbs per MMBtu}$$

However, 326 IAC 6-2-4(a) also states that for Q less than 10 MMBtu per hour, the particulate emissions shall not exceed 0.6 pounds per MMBtu. For this source, Q is equal to 4.41 MMBtu per hour (i.e., the summation of 2.60 MMBtu per hour and 1.80 MMBtu per hour). Therefore, the particulate emissions from this 4.41 MMBtu per hour boiler shall not exceed 0.6 pounds per MMBtu.

The potential to emit particulate matter from the 1.80 MMBtu per hour boiler is 0.0019 pound per MMBtu. Therefore, the boiler is able to comply with this limit.

Emergency Generator and Natural Gas-Fired Space Heaters

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

The emergency generator and the six (6) space heaters are not considered sources of indirect heating. Therefore, the emergency generator and the six (6) space heaters are not subject to the provisions of 326 IAC 6-2.

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

The emergency generator and the six (6) space heaters are combustion units and are not considered manufacturing processes. Therefore, the emergency generator and the six (6) space heaters are not subject to the provisions of 326 IAC 6-3.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The emergency generator and the six (6) space heaters each have a potential to emit less than 25 tons of sulfur dioxide per year or 10 pounds of sulfur dioxide per hour. Therefore, the emergency generator and the six (6) space heaters are not subject to the provisions of 326 IAC 7-1.1.

Compliance Determination and Monitoring Requirements

1. The following compliance monitoring requirements are applicable to this source:

   (a) The Permittee shall limit the potential to emit VOC from the muffin griddle, identified as Unit B, to less than 25 tons per twelve (12) consecutive month period. For a particular month, the source shall determine VOC emissions using the following equation:

$$VOC_i = \sum_{i=1}^{n} \frac{E_i B_i}{2000 \text{ lbs/ton}}$$

where:

VOC_i = The total VOC emissions per month from the muffin griddle for all bread types;
B_i = The amount of bread of type i produced during a given month (tons/month);
E_i = The VOC emission factor for type i bread (lb of VOC/ton of baked bread); and
n = The total number of bread types produced during a given month.

The VOC emission factor for each type of bread made in the muffin griddle shall be calculated using the following equation:

$$E_i = 0.40425 + 0.444585\ [(Y_i \times t_i) + (S \times t_s)]$$

where:

E_i = The VOC emission factor for type i bread (lb of VOC/ton of baked bread);
Y_i = The baker's percent of yeast in sponge;
t_i = The total time of fermentation in hours;
S = The baker's percent yeast added to dough; and
t_s = The proof time plus the floor time in hours.

(b) Records shall be kept of the amount and type of each bread that is produced during each month. In addition, records shall also be maintained of all information necessary to calculate the VOC emission factor for each typeo f bread produced during the compliance determination period.

Recommendation

The staff recommends to the Commissioner that the MSOP Renewal (M151-26750-00060) be approved. 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 July 14, 2008.

Conclusion

The operation of this bread baking plant shall be subject to the conditions of the attached MSOP Renewal No. M151-26750-00060.

Appendix A: Emissions Calculations

Emissions Summary

Company Name: New Horizons Baking Company
Address City IN Zip: 700 W. Water Street, Fremont, Indiana 46737
Permit Number: 151-26750-00060
Reviewer: Anne-Marie C. Hart
Date: July 16, 2008

	Tons/Year							
Emission Unit/Process	PM	PM10	PM2.5	SO2	NOx	VOC	CO	HAPs
Unit A								
Natural Gas Combustion	0.04	0.15	0.15	0.01	2.01	0.11	1.69	3.80E-02
Bread Baking	0.00	0.00	0.00	0.00	0.00	62.15	0.00	1.86 (Acetaldehyde)
Unit B								
Natural Gas Combustion	0.05	0.20	0.20	0.02	2.61	0.14	2.19	4.93E-02
Muffin Griddle	0.00	0.00	0.00	0.00	0.00	28.58	0.00	0.86 (Acetaldehyde)
Flour Storage Silos	171.92	60.23	60.23	0.00	0.00	0.00	0.00	0.00E+00
Natural Gas Boilers (Units D and E)	0.04	0.15	0.15	0.01	1.93	0.11	1.62	3.63E-02
Emergency Generator	6.65E-06	2.66E-05	2.66E-05	2.10E-06	3.50E-04	1.93E-05	2.94E-04	6.61E-06
Space Heaters	4.99E-03	2.00E-02	2.00E-02	1.58E-03	2.63E-01	1.45E-02	2.21E-01	4.96E-03
Total Emissions	**172.05**	**60.74**	**60.74**	**0.04**	**6.81**	**91.10**	**5.72**	**2.85**

Unit A Emissions (Natural Gas Combustion and Bread Baking)

Company Name: New Horizons Baking Company
Address City IN Zip: 700 W. Water Street, Fremont, Indiana 46737
Permit Number: 151-26750-00060
Reviewer: Anne-Marie C. Hart
Date: July 16, 2008

Natural Gas Combustion

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
4.6	40.3

	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.04	0.15	0.15	0.01	2.01	0.11	1.69

*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

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	4.231E-05	2.418E-05	1.511E-03	3.627E-02	6.850E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.007E-05	2.216E-05	2.821E-05	7.656E-06	4.231E-05
				Total HAPs:	**3.80E-02**

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

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
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
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Baking Emissions

Throughput **7700 pounds of bread per hour**

EPA-453/R-92-017, December 1992
Equation to determine emission factor: AP-42, Chapter 9.9.6 - Bread Baking (Supplement C, February 1997)

Ef (lb VOC/ton of baked bread) = 0.95 Yi + 0.195 ti - 0.51S - 0.86ts + 1.90

Where:				
	Yi	=	2.81	Initial baker's percent of yeast
	ti	=	2.75	Total yeast action time in hours
	S	=	1.25	Final (spike) baker's percent of yeast
	ts	=	0.91	Spiking time in hours
		=	3.69	lb of VOC/ton of baked bread

VOC Emissions (tons/year) = 62.15
Acetaldehyde Emissions (tons/year) **1.86**

Methodology
VOC Emissions (tons/year) = Throughput (lb/hr) x (1 ton/2000 lb) x Emission Factor (lb/ton) x 8760 (hours/year) x (1 ton/2000 pounds)
**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

Appendix A: Emissions Calculations

Unit B Emissions (Natural Gas Combustion and Muffin Griddle)
Company Name: New Horizons Baking Company
Address City IN Zip: 700 W. Water Street, Fremont, Indiana 46737
Permit Number: 151-26750-00060
Reviewer: Anne-Marie C. Hart
Date: July 16, 2008

Natural Gas Combustion

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
5.96	52.2

	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.05	0.20	0.20	0.02	2.61	0.14	2.19

*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

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	5.482E-05	3.133E-05	1.958E-03	4.699E-02	8.876E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.305E-05	2.872E-05	3.655E-05	9.920E-06	5.482E-05
				Total HAPs:	**4.93E-02**

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

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
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
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Baking Emissions

Throughput **2.1 tons of bread per hour**

Emission factor for muffin griddle based on the following equation from the American Institute of Bakers - Bakery Oven Ethanol Emissions, Vc
IX, Issue 12 (12/87)

Ef (lb VOC/ton of baked bread) = 0.40425 + 0.444585[(Yi x ti) + (S x ts)]

Where:				
	Yi	=	7.6	Baker's percent of yeast in sponge
	ti	=	0.8	Total time of fermentation, in hours
	S	=	0	Baker's percent of yeast added to dough
	ts	=	0	Proof time + Floor time, in hours
		=	3.11	lb of VOC/ton of baked bread

VOC Emissions (tons/year)	**=**	**28.58**
Acetaldehyde Emissions (tons/year) **	**=**	**0.86**

Methodology
VOC Emissions (tons/year) = Throughput (ton/hr) x Emission Factor (lb/ton) x 8760 (hours/year) x (1 ton/2000 pounds)
**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

Appendix A: Emissions Calculations

Two (2) Flour Storage Silos

Company Name: New Horizons Baking Company
Address City IN Zip: 700 W. Water Street, Fremont, Indiana 46737
Permit Number: 151-26750-00060
Reviewer: Anne-Marie C. Hart
Date: July 16, 2008

Maximum Throughput Rate for Two (2) Silos (tons/hr)	PM Emission Factor (lb/ton)	PM10/PM2.5 Emission Factor (lb/ton)	Emission Factor (lb/ton)	Controlled PM10/PM2.5 Emission Factor (lb/ton)
12.5	3.14	1.10	0.0089	0.0049

Potential PM Emissions (tons/yr)	Potential PM10/PM2.5 Emissions (tons/yr)	Potential Controlled PM Emissions (tons/yr)	Potential Controlled PM10/PM2.5 Emissions (tons/yr)
171.92	60.23	0.49	0.27

Emission factors (lb/ton) from AP-42, Table 11.12-2 - Truck unloading of cement supplement to elevated storage silo (pneumatic)
There are no emission factors for flour loading.
No emission factors are available for PM2.5. PM10 emission factor is assumed for PM2.5.

Methodology

Potential emissions (tons/yr) = Throughput (tons/hr) x Emission Factor (lb/ton) x 8760 (hr/yr) x (1 ton/2000 lb)

Appendix A: Emissions Calculations

Natural Gas Combustion - Boiler D and Boiler E
Company Name: **New Horizons Baking Company**
Address City IN Zip: **700 W. Water Street, Fremont, Indiana 46737**
Permit Number: **151-26750-00060**
Reviewer: **Anne-Marie C. Hart**
Date: **July 16, 2008**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
4.40	38.5

	Pollutant						
	PM*	PM10*	PM2.5	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.04	0.15	0.15	0.01	1.93	0.11	1.62

*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

	HAPs - Organics				
	Benzene	Dichlorobenzen	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	4.047E-05	2.313E-05	1.445E-03	3.469E-02	6.552E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	9.636E-06	2.120E-05	2.698E-05	7.323E-06	4.047E-05
				Total HAPs:	**3.64E-02**

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4, Tables 1.4-3 (Organic Compounds) and 1.4-4 (Metals)

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
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
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations

Natural Gas Combustion - 5 KVA Emergency Generator
Company Name: New Horizons Baking Company
Address City IN Zip: 700 W. Water Street, Fremont, Indiana 46737
Permit Number: 151-26750-00060
Reviewer: Anne-Marie C. Hart
Date: July 16, 2008

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.014	0.007

	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	6.65E-06	2.66E-05	2.66E-05	2.10E-06	3.50E-04	1.93E-05	2.94E-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

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	7.350E-09	4.200E-09	2.625E-07	6.300E-06	1.190E-08

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.750E-09	3.850E-09	4.900E-09	1.330E-09	7.350E-09
				Total HAPs:	**6.61E-06**

Emergency generators, by definition, are calculated as potentially operating a maximum of 500 hours
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

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
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
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 500 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations

Natural Gas Combustion - Six (6) Space Heaters

Company Name: **New Horizons Baking Company**
Address City IN Zip: **700 W. Water Street, Fremont, Indiana 46737**
Permit Number: **151-26750-00060**
Reviewer: **Anne-Marie C. Hart**
Date: **July 16, 2008**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.60	5.256

	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	4.99E-03	2.00E-02	2.00E-02	1.58E-03	2.63E-01	1.45E-02	2.21E-01

*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

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	5.519E-06	3.154E-06	1.971E-04	4.730E-03	8.935E-06

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMc	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/	1.314E-06	2.891E-06	3.679E-06	9.986E-07	5.519E-06
				Total HAPs:	**4.96E-03**

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

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
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
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton