



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Michael R. Pence*  
Governor

*Thomas W. Easterly*  
Commissioner

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

TO: Interested Parties / Applicant

DATE: April 23, 2013

RE: Mariah Foods, Inc. / 059-33011-00041

FROM: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

### Notice of Decision: Approval - Registration

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 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires 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  
FN-REGIS.dot 1/2/08



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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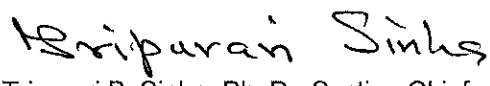
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## REGISTRATION OFFICE OF AIR QUALITY

**Mariah Foods, Inc.**  
**5593 US 40 W**  
**Greenfield, Indiana 46140**

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No. 059-33011-00041	
Issued by:   Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: April 23, 2013

## SECTION A

## SOURCE SUMMARY

This registration 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 Registrant 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 Registrant to obtain additional permits pursuant to 326 IAC 2.

### A.1 General Information

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The Registrant owns and operates a stationary meat processing facility.

Source Address:	5593 US 40 W, Greenfield, IN 46140
General Source Phone Number:	812-669-1472
SIC Code:	2011
County Location:	Hancock County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Registration

### A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) batch smokehouse, identified as SMH-1, approved for construction in April 2013, equipped with 1.65 MMBtu/hr natural gas fired furnace with a maximum throughput capacity of 6,416.67 pounds of meat cart per hour and 60 pounds of sawdust per hour, and exhausting to stack S-1.
- (b) One (1) batch smokehouse, identified as SMH-2, approved for construction in April 2013, equipped with 1.65 MMBtu/hr natural gas fired furnace with a maximum throughput capacity of 6,416.67 pounds of meat cart per hour and 60 pounds of sawdust per hour, and exhausting to stack S-2.
- (c) One (1) natural gas fired boiler, identified as B-1, approved for construction in April 2013, with a maximum heat input capacity of 0.0126 MMBtu/hr, and exhausting to stack S-3.

## SECTION B

## GENERAL CONDITIONS

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

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Terms in this registration 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 Effective Date of Registration [IC 13-15-5-3]

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Pursuant to IC 13-15-5-3, this registration 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.

### B.3 Registration Revocation [326 IAC 2-1.1-9]

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

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (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 registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM the fact that continuance of this registration is not consistent with purposes of this article.

### B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

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- (a) All terms and conditions of permits established prior to Registration No. 059-33011-00041 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 registration.

### B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

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Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

- (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 registration.
- (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 and Enforcement 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.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]**

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Pursuant to 326 IAC 2-5.5-6(a), an application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

**B.7 Registrations [326 IAC 2-5.1-2(i)]**

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Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

**B.8 Preventive Maintenance Plan [326 IAC 1-6-3]**

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- (a) If required by specific condition(s) in Section D of this registration, the Registrant shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this registration or ninety (90) days after initial start-up, whichever is later, 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 Registrant's control, the PMPs cannot be prepared and maintained within the above time frame, the Registrant may extend the date an additional ninety (90) days provided the Registrant notifies:

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

The Registrant shall implement the PMPs.

- (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 Registrant to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.
- (c) To the extent the Registrant is required by 40 CFR Part 60 or 40 CFR Part 63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such OMM Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source
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### Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

#### C.1 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 registration:

- (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.2 Fugitive Dust Emissions [326 IAC 6-4]

The Registrant 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).

## SECTION D.1

## OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (a) One (1) batch smokehouse, identified as SMH-1, approved for construction in April 2013, equipped with 1.65 MMBtu/hr natural gas fired furnace with a maximum throughput capacity of 6,416.67 pounds of meat cart per hour and 60 pounds of sawdust per hour, and exhausting to stack S-1.
- (b) One (1) batch smokehouse, identified as SMH-2, approved for construction in April 2013, equipped with 1.65 MMBtu/hr natural gas fired furnace with a maximum throughput capacity of 6,416.67 pounds of meat cart per hour and 60 pounds of sawdust per hour, and exhausting to stack S-2.

(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 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

#### D.1.1 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the smokehouses identified as SMH-1 & SMH-2 shall not exceed as follows.

Emission Unit	Process Weight Rate (tons/hr)	326 IAC 6-3-2 Limit (lbs/hr)
Smokehouse SMH-1	3.21	8.96
Smokehouse SMH-2	3.21	8.96

The pound per hour limitation was calculated with the following equation:

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:

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

#### D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive Maintenance Plan contains the Registrant's obligation with regard to the preventive maintenance plan required by this condition.

## SECTION D.2

## OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (c) One (1) natural gas fired boiler, identified as B-1, approved for construction in April 2013, with a maximum heat input capacity of 0.0126 MMBtu/hr, and exhausting to stack S-3.

(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 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

#### D.2.1 Particulate Emission Limitations for Source of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitation for Source of Indirect Heating), particulate matter (PM), from boiler B-1 shall in no case exceed 0.6 lb/MMBtu heat input.

#### D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive Maintenance Plan contains the Registrant's obligation with regard to the preventive maintenance plan required by this condition.



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH**

**REGISTRATION  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

<b>Company Name:</b>	Mariah Foods, Inc.
<b>Address:</b>	5593 US 40 W
<b>City:</b>	Greenfield, Indiana 46140
<b>Phone Number:</b>	812-669-1472
<b>Registration No.:</b>	059-33011-00041

I hereby certify that Mariah Foods, Inc. is :

I hereby certify that Mariah Foods, Inc. is :

- ☐ still in operation.
- ☐ no longer in operation.
- ☐ in compliance with the requirements of Registration No. 059-33011-00041.
- ☐ not in compliance with the requirements of Registration No. 059-33011-00041.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Phone Number:</b>
<b>Date:</b>

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.

<b>Noncompliance:</b>

**Indiana Department of Environmental Management  
Office of Air Quality**

**Technical Support Document (TSD) for a Registration**

<b>Source Description and Location</b>
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<b>Source Name:</b>	<b>Mariah Foods, Inc.</b>
<b>Source Location:</b>	<b>5593 US 40 W, Greenfield, IN 46140</b>
<b>County:</b>	<b>Hancock</b>
<b>SIC Code:</b>	<b>2011</b>
<b>Registration No.:</b>	<b>059-33011-00041</b>
<b>Permit Reviewer:</b>	<b>Muhammad D. Khan</b>

On March 27, 2013, the Office of Air Quality (OAQ) received an application from Mariah Foods, Inc. related to the construction and operation of a new meat processing facility.

<b>Existing Approvals</b>
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There have been no previous approvals issued to this source.

<b>County Attainment Status</b>
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The source is located in Hancock County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Attainment effective October 19, 2007, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> 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 PM <sub>2.5</sub> .	

- (a) **Ozone Standards**  
Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) 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 NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Hancock County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM<sub>2.5</sub>**  
Hancock County has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub> emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM<sub>2.5</sub> significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM<sub>2.5</sub> and SO<sub>2</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

- (c) Other Criteria Pollutants  
Hancock County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

#### **Fugitive Emissions**

The fugitive emissions of criteria pollutants, hazardous air pollutants, and greenhouse gases are counted toward the determination of 326 IAC 2-5.1-2 (Registrations) applicability.

#### **Background and Description of Emission Units and Pollution Control Equipment**

The Office of Air Quality (OAQ) has reviewed an application, submitted by Mariah Foods, Inc. on March 27, 2013, relating to operation of a meat processing facility.

The following is a list of the new emission unit(s):

- (a) One (1) batch smokehouse, identified as SMH-1, approved for construction in April 2013, equipped with 1.65 MMBtu/hr natural gas fired furnace with a maximum throughput capacity of 6,416.67 pounds of meat cart per hour and 60 pounds of sawdust per hour, and exhausting to stack S-1.
- (b) One (1) batch smokehouse, identified as SMH-2, approved for construction in April 2013, equipped with 1.65 MMBtu/hr natural gas fired furnace with a maximum throughput capacity of 6,416.67 pounds of meat cart per hour and 60 pounds of sawdust per hour, and exhausting to stack S-2.
- (c) One (1) natural gas fired boiler, identified as B-1, approved for construction in April 2013, with a maximum heat input capacity of 0.0126 MMBtu/hr, and exhausting to stack S-3.

#### **Enforcement Issues**

There are no pending enforcement actions related to this source.

#### **Emission Calculations**

See Appendix A of this TSD for detailed emission calculations.

### Permit Level Determination – Registration

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)									
	PM	PM10*	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs as CO <sub>2</sub> e**	Total HAPs	Worst Single HAP
Smokehouse SMH-1 & SMH-2	13.93	13.93	13.93	-	-	11.56	-	-	2.01	1.58 (Phenol)
Smokehouse Furnaces	0.03	0.11	0.11	0.009	1.42	0.08	1.19	1,711	0.03	0.025 (Hexane)
Boiler B-1	0.0001	0.0004	0.0004	negl.	0.005	0.0003	0.004	7	negl.	0.00009 (Hexane)
<b>Total PTE of Entire Source</b>	<b>13.96</b>	<b>14.04</b>	<b>14.04</b>	<b>0.009</b>	<b>1.42</b>	<b>11.64</b>	<b>1.19</b>	<b>1,717</b>	<b>2.04</b>	<b>1.58 (Phenol)</b>
Exemptions Levels**	5	5	5	10	10	10	25	100,000	<25	<10
Registration Levels**	25	25	25	25	25	25	100	100,000	<25	<10
negl. = negligible *Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". **The 100,000 CO <sub>2</sub> e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.										

- The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of PM, PM10, NO<sub>x</sub>, SO, VOC and CO are within the ranges listed in 326 IAC 2-5.1-2(a)(1). The PTE of all other regulated criteria pollutants are less than the ranges listed in 326 IAC 2-5.1-2(a)(1). Therefore, the source is subject to the provisions of 326 IAC 2-5.1-2 (Registrations). A Registration will be issued.
- The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) 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, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.
- The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO<sub>2</sub> equivalent emissions (CO<sub>2</sub>e) per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

### Federal Rule Applicability Determination

#### New Source Performance Standards (NSPS)

- The requirements of the New Source Performance Standard 40 CFR 60, Subpart Dc - Standard of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (326 IAC 12), are not included in the permit natural gas fired boiler identified as B-1 because this boiler has a maximum heat input capacity of less than 10 MMBtu per hour.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (g) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

<b>State Rule Applicability Determination</b>
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The following state rules are applicable to the source:

- (a) 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))  
The Potential to Emit of any pollutant subject to regulations under the Clean Air Act (CAA) of the entire source is less than 250 tons per year and is not one of the twenty-eight (28) listed source categories, therefore, this source is a minor for PSD purposes and is not subject to the provisions of 326 IAC 2-2.
- (b) 326 IAC 2-5.1-2 (Registrations)  
Registration applicability is discussed under the Permit Level Determination – Registration section above.
- (c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
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. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA), therefore, none of the emission units are subject to the provisions of 326 IAC 2-4.1.
- (d) 326 IAC 2-6 (Emission Reporting)  
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (e) 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:
- (1) 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.
  - (2) 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 non overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (f) 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.

- (g) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)  
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.
- (h) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)  
The unlimited SO<sub>2</sub> potential emissions from each of the emission units are less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 7-1.1 do not apply.
- (i) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)  
Each of the emission units at this source is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.

**Boiler B-1**

- (j) 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating)  
Pursuant to 326 IAC 6-2-4 particulate matter emissions from natural gas fired boiler identified as Boiler B-1 shall not exceed as follows:

$$P_t = 1.09/Q^{0.26} \quad \text{where} \quad \begin{array}{l} P_t = \text{Pounds of PM per million Btu (lb/MMBtu)} \\ Q = \text{Total Source maximum operating capacity (MMBtu/hr)} \end{array}$$

$$P_t = 1.97 \text{ lb/MMBtu}$$

For Q less than 10 MMBtu/hr  $P_t$  shall not exceed 0.6 lb/MMBtu.

The boiler is in compliance with 326 IAC 6-2-4 because the PM emissions from the boiler are 0.001lb/MMBtu.

**Batch Smokehouses (SMH-1 & SMH-2)**

- (k) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the smokehouses identified as SMH-1 & SMH-2 shall not exceed as follows.

Emission Unit	Process Weight Rate (tons/hr)	326 IAC 6-3-2 Limit (lbs/hr)
Smokehouse SMH-1	3.21	8.96
Smokehouse SMH-2	3.21	8.96

The pound per hour limitation was calculated with the following equation:

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:

$$E = 4.10 P^{0.67} \quad \text{where} \quad \begin{array}{l} E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour} \end{array}$$

Based on calculations, the control device is not needed to comply with this limit.

<b>Conclusion and Recommendation</b>
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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 March 27, 2013.

The construction and operation of this source shall be subject to the conditions of the attached proposed Registration No. 059-33011-00041. The staff recommends to the Commissioner that this Registration be approved.

<b>IDEM Contact</b>
---------------------

- (a) Questions regarding this proposed permit can be directed to Muhammad D. Khan at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-9664 or toll free at 1-800-451-6027 extension 3-9664.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.in.gov/idem](http://www.in.gov/idem)

No. of Units	Heat Input Capacity (MMBtu/hr)
2	1.65

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
3.3	1020	28.34

	Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.03	0.11	0.11	0.01	1.42	0.08	1.19

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

#### 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/1,020 MMBtu

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

#### HAPS Calculations

	HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	<b>Total - Organics</b>
Potential Emission in tons/yr	2.976E-05	1.700E-05	1.063E-03	2.551E-02	4.818E-05	<b>2.666E-02</b>

	HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	<b>Total - Metals</b>
Potential Emission in tons/yr	7.085E-06	1.559E-05	1.984E-05	5.385E-06	2.976E-05	<b>7.765E-05</b>
					<b>Total HAPs</b>	<b>2.674E-02</b>
					<b>Worst HAP</b>	<b>2.551E-02</b>

Methodology is the same as above

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

#### Greenhouse Gas Calculations

	Greenhouse Gas		
Emission Factor in lb/MMcf	CO2 120,000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	1,700	0.0	0.0
Summed Potential Emissions in tons/yr	1,701		
CO2e Total in tons/yr	1,711		

#### Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).



**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only - Boiler B-1**

Page 2 of 4 TSD App A

**MM BTU/HR <100**  
**Company Name: Mariah Foods, Inc.**  
**Address City IN Zip: 5593 US 40 W, Greenfield, IN 46140**  
**Permit Number: 059-33011-00041**  
**Plt ID: 059-00041**  
**Reviewer: Muhammad D. Khan**  
**Date: 4/16/2013**

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
0.0126	1020	0.11

	Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100	5.5	84
					**see below		
Potential Emission in tons/yr	0.0001	0.0004	0.0004	0.00003	0.0054	0.0003	0.0045

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**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/1,020 MME

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**HAPS Calculations**

	HAPs - Organics					
Emission Factor in lb/MMcf	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total - Organics
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	1.136E-07	6.493E-08	4.058E-06	9.739E-05	1.840E-07	1.018E-04

	HAPs - Metals					
Emission Factor in lb/MMcf	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	2.705E-08	5.952E-08	7.575E-08	2.056E-08	1.136E-07	2.965E-07
					<b>Total HAPs</b>	<b>1.021E-04</b>
					<b>Worst HAP</b>	<b>9.739E-05</b>

Methodology is the same as above.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Greenhouse Gas Calculations**

	Greenhouse Gas		
Emission Factor in lb/MMcf	CO2	CH4	N2O
	120,000	2.3	2.2
Potential Emission in tons/yr	6	0.0	0.0
Summed Potential Emissions in tons/yr	6		
CO2e Total in tons/yr	7		

**Methodology**

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O

**Appendix A: Emissions Calculations  
Smokehouses**

**Company Name:** Mariah Foods, Inc.  
**Address City IN Zip:** 5593 US 40 W, Greenfield, IN 46140  
**Permit Number:** 059-33011-00041  
**Plt ID:** 059-00041  
**Reviewer:** Muhammad D. Khan  
**Date:** 4/16/2013

Pollutant	Emission Factor (lb/ton)	Smokehouse (SMH-1)		Smokehouse (SMH-2)		Total PTE (tons/yr)
		Throughput (lb/hr)	Potential Emissions (tons/year)	Throughput (lb/hr)	Potential Emissions (tons/year)	
PM/PM10/PM2.5	53	60	6.96	60	6.96	13.93
VOC	44	60	5.78	60	5.78	11.56
Formaldehyde	1.33	60	0.17	60	0.17	0.35
Phenol	6	60	0.79	60	0.79	1.58
Acetaldehyde	0.33	60	0.04	60	0.04	0.09
Total HAPs						2.01

**Methodology:**

Emission factors for PM, PM2.5, PM10 and VOC are from FIRE Version 6.23, SCC#3-02-013-02.

Emission factors for HAPs were based on information provided by the source.

PTE (tons/year) = Throughput (lbs/hr) \* 8760 hr/year \* (1 ton/2000 lbs) \* EF (lb/ton) \* (1 ton/2000 lb)

**Appendix A: Emissions Calculations  
Summary**

Page 4 of 4 TSD App A

**Company Name:** Mariah Foods, Inc.  
**Address City IN Zip:** 5593 US 40 W, Greenfield, IN 46140  
**Permit Number:** 059-33011-00041  
**Plt ID:** 059-00041  
**Reviewer:** Muhammad D. Khan  
**Date:** 4/16/2013

Units	Potential Emissions (tons/year)									
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Single HAP	Total HAP	GHGs
<b>Smokehouses (SMH-1 &amp; SMH-2)</b>	13.93	13.93	13.93	-	-	11.56	-	1.58 Phenol	2.01	-
<b>Smokehouse Furnaces</b>	0.03	0.11	0.11	0.009	1.42	0.08	1.19	0.025 (Heaxane)	0.03	1711
<b>Boiler B-1</b>	0.0001	0.0004	0.0004	0.00003	0.0054	0.0003	0.0045	0.0007 (Hexane)	0.0001	7
<b>Total</b>	13.96	14.04	14.04	0.009	1.42	11.64	1.19	1.58 (Phenol)	2.04	1717



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Michael R. Pence*  
**Governor**

*Thomas W. Easterly*  
**Commissioner**

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

## SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Bill Jones  
Mariah Foods, Inc.  
1333 Indiana Avenue  
Columbus, In 47201

DATE: April 23, 2013

FROM: Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

SUBJECT: Final Decision  
Registration  
059-33011-00041

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.


The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:  
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at [jbrush@idem.IN.gov](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 11/30/07

# Mail Code 61-53

IDEM Staff	GHOTOPP 4/23/2013 Mariah Foods, Inc. 059-33011-00041 Final		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	 Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	

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											Remarks
1		Bill Jones Mariah Foods, Inc. 1333 Indiana Ave Columbus IN 47201 (Source CAATS) via confirmed delivery									
2		Hancock County Commissioners 111 American Legion #219 Greenfield IN 46140 (Local Official)									
3		Hancock County Health Department 111 America Legion Greenfield IN 46140-2365 (Health Department)									
4		Greenfield City Council and Mayors Office 10 S. State St. Greenfield IN 46140 (Local Official)									
5		Timothy Scroggins 3171 W 1000 N Fortville IN 46040 (Affected Party)									
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