



800 CW Stevens Blvd.
Grayson, KY 41143
(606) 474-3900

Good food. Responsibly.®

October 1, 2025

**Kentucky Division for Air Quality
ATTN: Permit Support Section
300 Sower Blvd.
Frankfort, KY 40601**

RE: Agency Interest ID: 725 Air Permit S-10-069 R5, Permit Renewal Application

To Whom It May Concern:

Enclosed is the Smithfield Packaged Meats Corp – Grayson, KY Air Permit Renewal Application and supporting documentation.

If you have any questions or comments do not hesitate to contact me at the number listed above.

Sincerely,

Jeff Salyer, Plant Manager

**Attachments: Original Application DEP Forms 7007AI, 7007A, 7007B, 7007DD, 7007GG, 7007N, and 7007V and Supporting documentation
2 Copies of Application**

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007AI

Administrative Information

- 1 Section AI.1: Source Information
- 1 Section AI.2: Applicant Information
- 1 Section AI.3: Owner Information
- 1 Section AI.4: Type of Application
- 1 Section AI.5: Other Required Information
- 1 Section AI.6: Signature Block
- 1 Section AI.7: Notes, Comments, and Explanations

Additional Documentation

- 2 Additional Documentation attached

Source Name: Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #: 21-043-00038

Permit #: S-10-069 R5

Agency Interest (AI) ID: 725

Date: 9/26/2025

Section AI.1: Source Information

Physical Location	Street:	<u>800 CW Stevens Blvd.</u>	County:	<u>Carter</u>	Zip Code:	<u>41143</u>
Address:	City:	<u>Grayson</u>				
Mailing Address:	Street or P.O. Box:	<u>800 CW Stevens Blvd.</u>	State:	<u>KY</u>	Zip Code:	<u>41143</u>
	City:	<u>Grayson</u>				

Standard Coordinates for Source Physical Location

Longitude: 82.5551 W (decimal degrees) Latitude: 38.2054 N (decimal degrees)

Primary (NAICS) Category: Meat processed from Carcasses Primary NAICS #: 311612

Classification (SIC) Category:

Sausages and Other Prepared Meats Products

Primary SIC #:

2013

Briefly discuss the type of business conducted at this site:

The facility produces spiral sliced hams.

Description of Area Surrounding Source:

Rural Area

Industrial Park

Residential Area

Is any part of the source located on federal land?

Yes
 No

Number of Employees:

495

Approximate distance to nearest residence or commercial property:

550 ft

Property Area:

31.2 acre

Is this source portable?

Yes
 No

What other environmental permits or registrations does this source currently hold or need to obtain in Kentucky?

NPDES/KPDES:

Currently Hold

Need

N/A

Solid Waste:

Currently Hold

Need

N/A

RCRA:

Currently Hold

Need

N/A

UST:

Currently Hold

Need

N/A

Type of Regulated Waste Activity:

Mixed Waste Generator

Generator

Recycler

Other: VSQG

U.S. Importer of Hazardous Waste

Transporter

Treatment/Storage/Disposal Facility

N/A

Section A1.2: Applicant Information

Applicant Name: Jeff Salyer

Title: (if individual) Plant Manager

Mailing Address: Street or P.O. Box: 800 CW Stevens Blvd

City: Grayson State: KY Zip Code: 41143

Email: (if individual) jsalyer@smithfield.com

Phone: (606) 474-3900

Technical Contact

Name: Carol Sheehy

Title: Senior Regional Environmental Health and Safety Manager

Mailing Address: Street or P.O. Box: 3065 Elliott Manor Drive

City: Mason State: OH Zip Code: 45040

Email: csheehy@smithfield.com

Phone: (513) 504-3528

Air Permit Contact for Source

Name: Mike Lyons

Title: Environmental Coordinator

Mailing Address: Street or P.O. Box: 800 CW Stevens Blvd

City: Grayson State: KY Zip Code: 41143

Email: mlyons@smithfield.com

Phone: 740-861-4956

Section AI.3: Owner Information

Owner same as applicant

Name:

Title:

Mailing Address:

Street or P.O. Box:

City:

State:

Zip Code:

Email:

Phone:

List names of owners and officers of the company who have an interest in the company of 5% or more.

Name

Position

Section AI.4: Type of Application

Current Status: Title V Conditional Major State-Origin General Permit Registration None

Name Change Initial Registration Significant Revision Administrative Permit Amendment

Renewal Permit Revised Registration Minor Revision Initial Source-wide Operating Permit

Requested Action: 502(b)(10)Change Extension Request Addition of New Facility Portable Plant Relocation Notice
(check all that apply)

Revision Off Permit Change Landfill Alternate Compliance Submittal Modification of Existing Facilities
 Ownership Change Closure

Requested Status: Title V Conditional Major State-Origin PSD NSR Other: _____

Is the source requesting a limitation of potential emissions?

Yes No

Pollutant: **Requested Limit:** **Pollutant:** **Requested Limit:**

Particulate Matter _____ Single HAP _____

Volatile Organic Compounds (VOC) _____ Combined HAPs _____

Carbon Monoxide 280 tons wood use/year Air Toxics (40 CFR 68, Subpart F) _____

Nitrogen Oxides _____ Carbon Dioxide _____

Sulfur Dioxide _____ Greenhouse Gases (GHG) _____

Lead _____ Other _____

For New Construction:

Proposed Start Date of Construction: (MM/YYYY) _____ **Proposed Operation Start-Up Date:** (MM/YYYY) _____

For Modifications:

Proposed Start Date of Modification: (MM/YYYY) _____ **Proposed Operation Start-Up Date:** (MM/YYYY) _____

Applicant is seeking coverage under a permit shield. Yes No **Identify any non-applicable requirements for which permit shield is sought on a separate attachment to the application.**

Section A1.5 Other Required Information

Indicate the documents attached as part of this application:

- DEP7007A Indirect Heat Exchangers and Turbines
- DEP7007B Manufacturing or Processing Operations
- DEP7007C Incinerators and Waste Burners
- DEP7007F Episode Standby Plan
- DEP7007J Volatile Liquid Storage
- DEP7007K Surface Coating or Printing Operations
- DEP7007L Mineral Processes
- DEP7007M Metal Cleaning Degreasers
- DEP7007N Source Emissions Profile
- DEP7007P Perchloroethylene Dry Cleaning Systems
- DEP7007R Emission Offset Credit
- DEP7007S Service Stations
- DEP7007T Metal Plating and Surface Treatment Operations
- DEP7007V Applicable Requirements and Compliance Activities
- DEP7007Y Good Engineering Practice and Stack Height Determination
- DEP7007AA Compliance Schedule for Non-complying Emission Units
- DEP7007BB Certified Progress Report
- DEP7007CC Compliance Certification
- DEP7007DD Insignificant Activities
- DEP7007EE Internal Combustion Engines
- DEP7007FF Secondary Aluminum Processing
- DEP7007GG Control Equipment
- DEP7007HH Haul Roads
- Confidentiality Claim
- Ownership Change Form
- Secretary of State Certificate
- Flowcharts or diagrams depicting process
- Digital Line Graphs (DLG) files of buildings, roads, etc.
- Site Map
- Map or drawing depicting location of facility
- Safety Data Sheet (SDS)
- Emergency Response Plan
- Other: Emissions calculations Exhibit #1

Section A1.6: Signature Block

I, the undersigned, hereby certify under penalty of law, that I am a responsible official*, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.



 Authorized Signature

Jeff Salyer

Type or Printed Name of Signatory

Oct 1 2025

 Date

Plant Manager

Title of Signatory

*Responsible official as defined by 401 KAR 52:001.

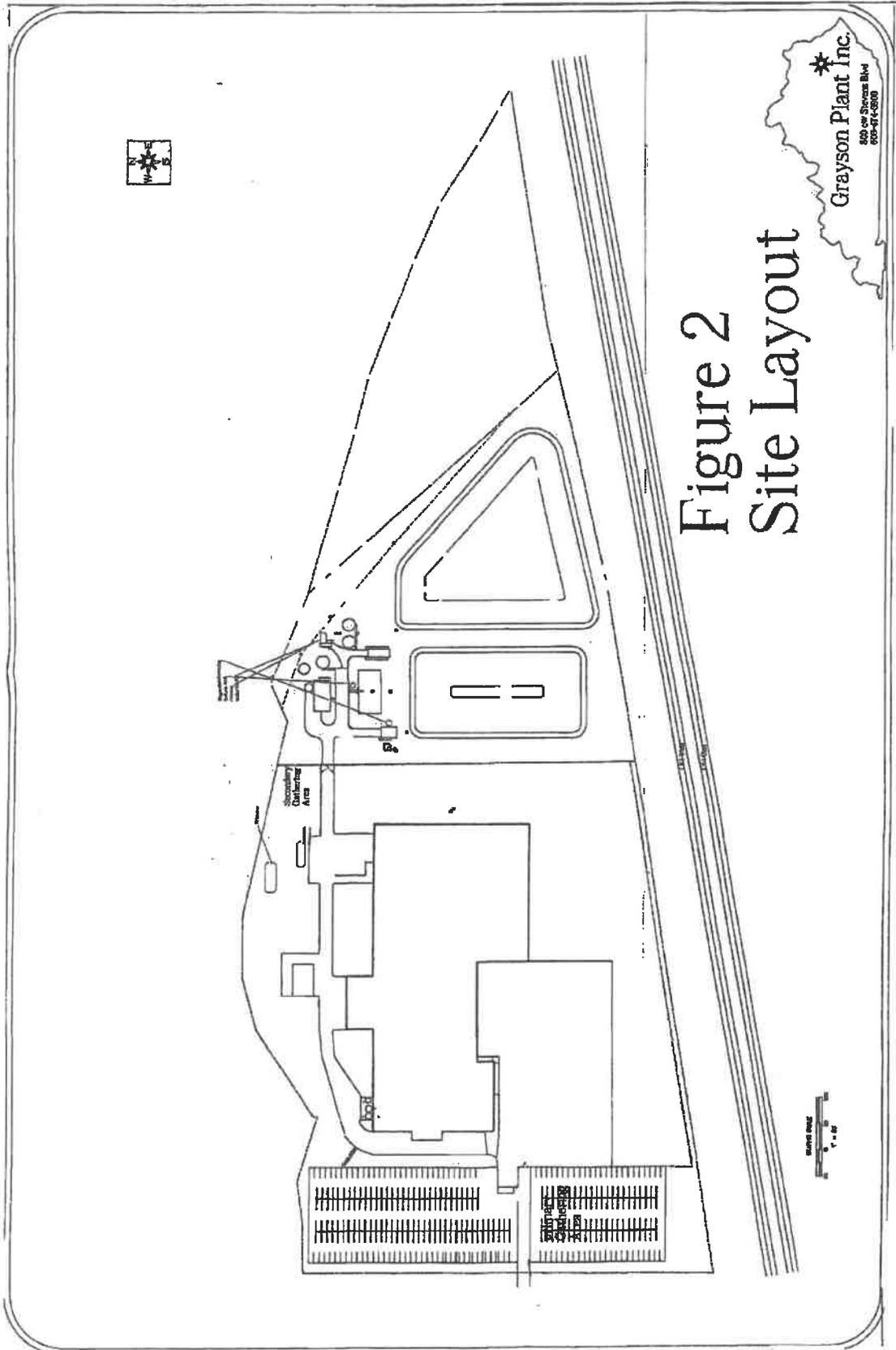


Figure 2
Site Layout

Grayson Plant Inc.
500 W. Stevens Blvd
600-917-6500



DEP7007A

Indirect Heat Exchangers and Turbines

- 2 Section A.1: General Information
- 2 Section A.2: Operating and Fuel Information
- 0 Section A.3: Notes, Comments, and Explanations

Additional Documentation
Complete DEP7007AI, DEP7007N, DEP7007V, and DEP7007GG.
Manufacturer's specifications

Division for Air Quality 300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999
--

Source Name: Smithfield Packaged Meats Corp - Grayson
KY EIS (AFS) #: 21-043-00038
Permit #: S-10-069 R5
Agency Interest (AD) ID: 725
Date: 9/26/2025

Section A.1: General Information

Emission Unit #	Emission Unit Name	Process ID	Process Name	Identify General Type: Indirect Heat Exchanger, Gas Turbine, or Combustion Turbine	Indirect Heat Exchanger Configuration	Manufacturer	Model No./Serial No.	Proposed/Actual Date of Construction Commencement (MM/YYYY)	SCC Code	SCC Units	Control Device ID	Stack ID
01	Boiler 1	1	Boiler	Indirect Heat Exchanger		Kewanee	H3S-250-G	09/1989	10200602	MCF	N/A	01
02	Boiler 2	2	Boiler	Indirect Heat Exchanger		Kewanee	H3S-250-G	09/1989	10200602	MCF	N/A	02
03	Boiler 3	3	Boiler	Indirect Heat Exchanger		Kewanee	H3S-100-G	09/1989	10100603	MCF	N/A	03
04	Boiler 4	4	Boiler	Indirect Heat Exchanger		York Shipley	560C-H3D-100-W030-NM14-22810	2014	10201402	MCF	N/A	04
04	Boiler 4	4	Boiler	Indirect Heat Exchanger		York Shipley	560C-H3D-100-W030-NM14-22810	2014	10300603	MCF	N/A	04
05	Food Processing Oven 1	5	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	1WS	05
06	Food Processing Oven 2	6	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	2WS	06
07	Food Processing Oven 3	7	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	3WS	07
08	Food Processing Oven 4	8	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	4WS	08
09	Food Processing Oven 5	9	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	5WS	09

Division for Air Quality
 300 Sower Boulevard
 Frankfort, KY 40601
 (502) 564-3999

DEP7007A

Indirect Heat Exchangers and Turbines

___ Section A.1: General Information
 ___ Section A.2: Operating and Fuel Information
 ___ Section A.3: Notes, Comments, and Explanations

Additional Documentation
 ___ Complete DEP7007AI, DEP7007N, DEP7007V, and DEP7007GG.
 ___ Manufacturer's specifications

Source Name:

Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #:

21-043-00038

Permit #:

S-10-069 R5

Agency Interest (AI) ID:

725

Date:

9/26/2025

Section A.1: General Information

Emission Unit #	Emission Unit Name	Process ID	Process Name	Identify General Type: Indirect Heat Exchanger, Gas Turbine, or Combustion Turbine	Indirect Heat Exchanger Configuration	Manufacturer	Model No./Serial No.	Proposed/Actual Date of Construction Commencement (MM/YYYY)	SCC Code	SCC Units	Control Device ID	Stack ID
06	Food Processing Oven 6	10	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	6WS	10
07	Food Processing Oven 7	11	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	7WS	11
08	Food Processing Oven 8	12	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	8WS	12
09	Food Processing Oven 9	13	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	9WS	13
10	Food Processing Oven 10	14	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	10WS	14

Section A.2: Operating and Fuel Information

Emission Unit #	If multipurpose unit, identify the percentage of use by purpose				Rated Capacity Heat Input (MMBTU/hr)	Rated Capacity Power Output		Describe Operating Scenario (only if this unit will be used in different configurations)	Classify Fuel as Primary or Secondary	Identify Fuel Type: Coal, Natural Gas, Wood, Biomass, Landfill/Digester Gas, Fuel Oil # (Specify 1-6), or Other	Heat Content (HHV)		Maximum Operating Hours	Ash Content (%)	Sulfur Content (%)
	Space Heat	Process Heat	Power	Emergency		(Specify units: hp, MW, or lb steam/hr)	(Specify units: Btu/lb, Btu/gal, or Btu/scf)								
01		100			10.46	250	hp		Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
02		100			10.46	250	hp		Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
03		100			4.16	100	hp		Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
04		100			4.19	100	hp		Primary	Digester Gas	600	Btu/scf	24	0	
04				100	4.19	100	hp		Secondary	Natural Gas	1000	Btu/scf	24	0	0.0006
05		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
06		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
07		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
08		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
09		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006

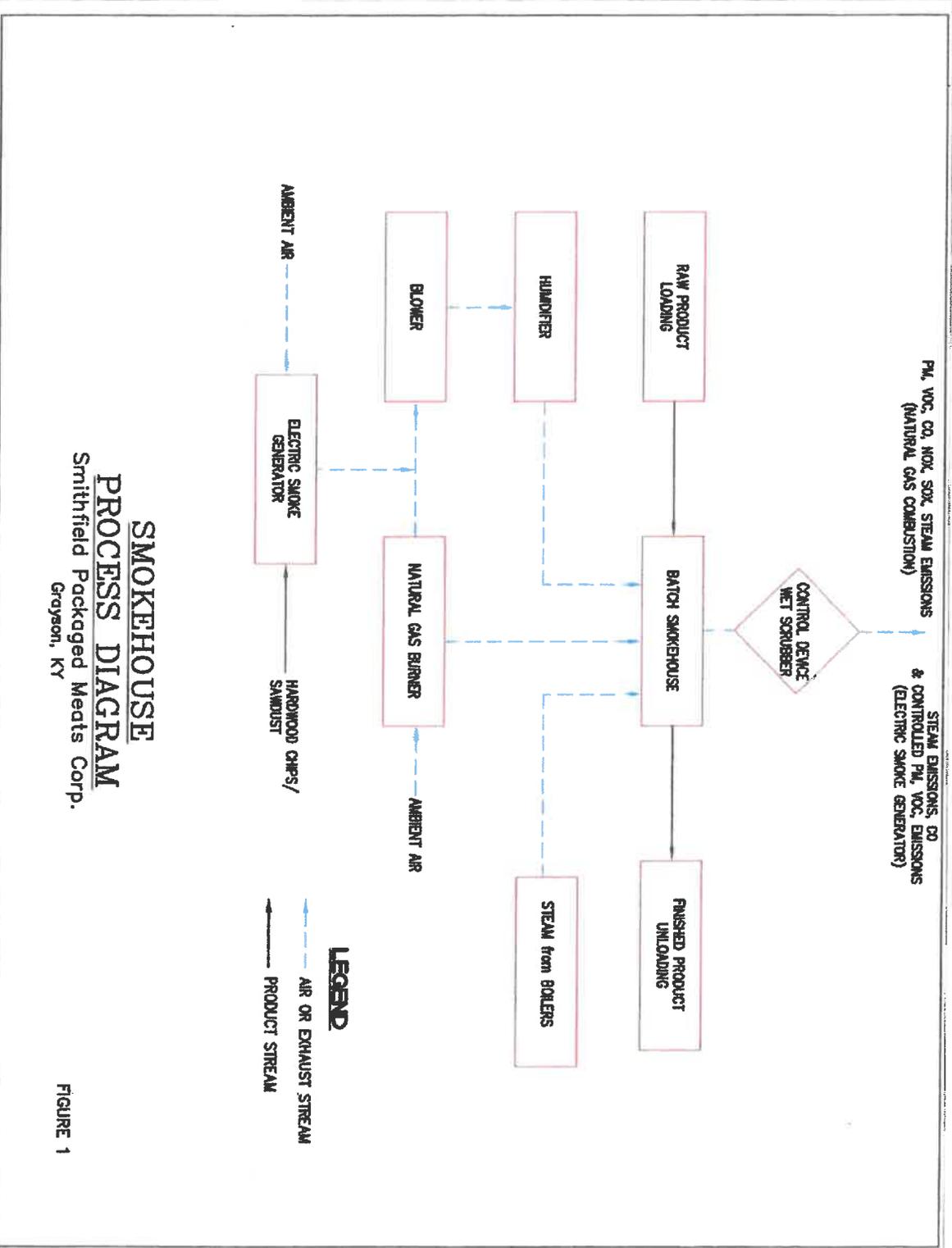
Section A.2: Operating and Fuel Information

Emission Unit #	If multipurpose unit, identify the percentage of use by purpose				Rated Heat Capacity (MMBTU/hr)	Rated Capacity Power Output		Describe Operating Scenario <small>(only if this unit will be used in different configurations)</small>	Classify Fuel as Primary or Secondary	Identify Fuel Type: <small>Coal, Natural Gas, Wood, Biomass, Landfill/Digester Gas, Fuel Oil # (specify 1-6), or Other</small>	Heat Content (HHV)		Maximum Operating Hours	Ash Content (%)	Sulfur Content (%)
	Space Heat	Process Heat	Power	Emergency		(Specify units: hp, MW, or lb steam/hr)	(Specify units: Btu/lb, Btu/gal, or Btu/scf)								
10		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
11		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
12		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
13		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
14		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006

Section B.2: Materials and Fuel Information

**Maximum yearly fuel usage rate only applies if applicant request operating restrictions through federally enforceable limitations.*

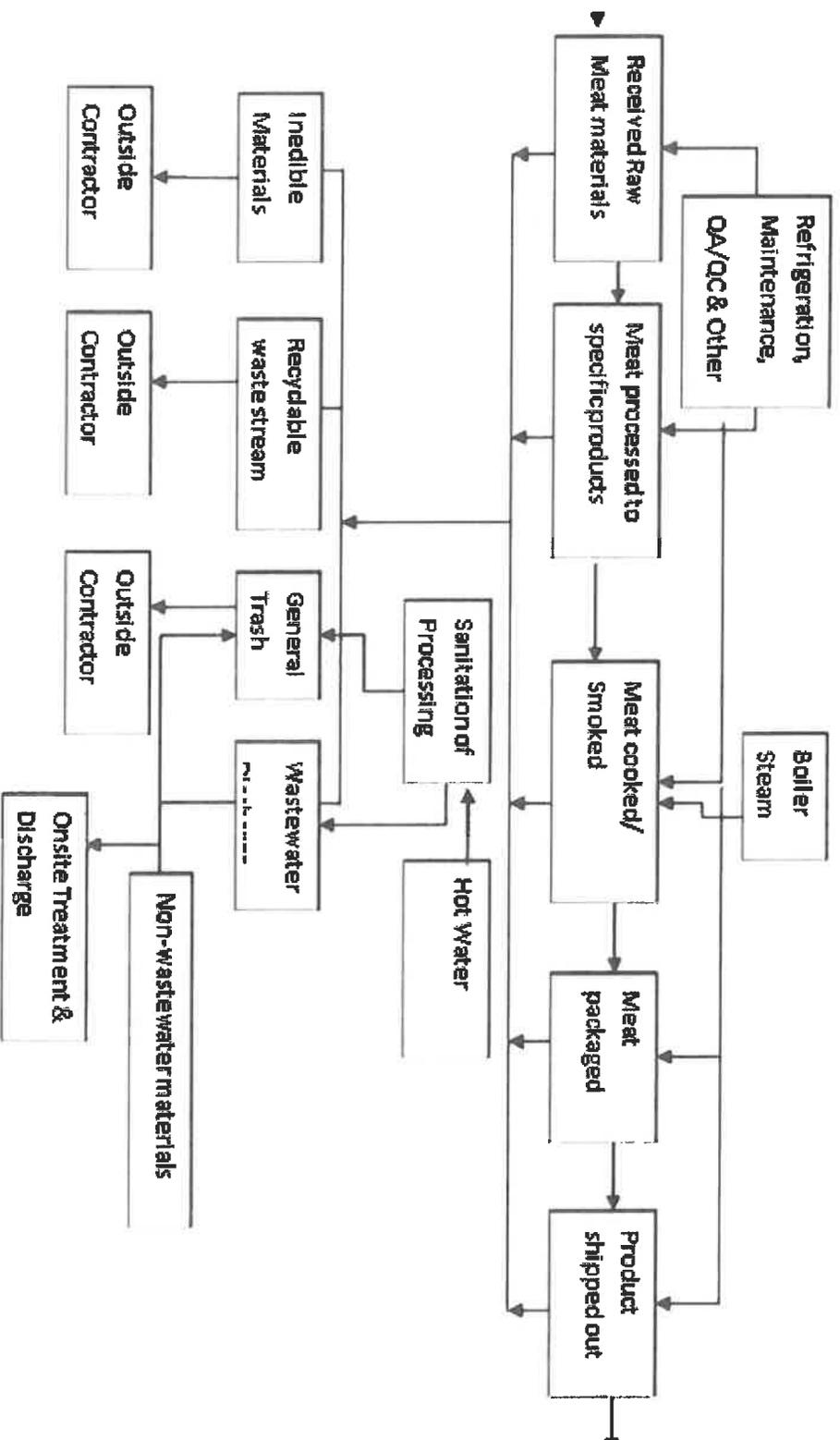
Emission Unit #	Emission Unit Name	Name of Raw Materials Input	Maximum Quantity of Each Raw Material Input		Total Process Weight Rate for Emission Unit (tons/hr)	Name of Finished Materials	Maximum Quantity of Each Finished Material Output		Fuel Type	Maximum Hourly Fuel Usage Rate		Maximum Yearly Fuel Usage Rate		Sulfur Content (%)	Ash Content (%)
			(Specify Units/hr)				(Specify Units/hr)			(Specify Units)		(Specify Units)			
15-24	Smoke Generators 1-10	Hardwood Chips	26	lb/hr	0.013	Used charred woodchips	N/A	N/A	Electric	See Notes		See Notes		Not Applicable	Not Applicable
5-14	Food Processing Ovens 1-10	Raw Meat	4400	lb/hr	2.2	Ready to Eat Meats	N/A	N/A	Natural Gas	40	mmBtu/hr	350400	mmBtu/yr	0	0.0006



**SMOKEHOUSE
PROCESS DIAGRAM**

Smithfield Packaged Meats Corp.
Grayson, KY

FIGURE 1



Process Flow

Division for Air Quality
 300 Sower Boulevard
 Frankfort, KY 40601
 (502) 564-3999

DEP7007DD

Insignificant Activities

- 3 Section DD.1: Table of Insignificant Activities
- 3 Section DD.2: Signature Block
- 1 Section DD.3: Notes, Comments, and Explanations

Source Name: Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #: 21-043-00038

Permit #: S-10-069 R5

Agency Interest (AI) ID: 725

Date: 9/26/2025

Section DD.1: Table of Insignificant Activities

*Identify each activity with a unique Insignificant Activity number (IA #); for example: 1, 2, 3... etc.

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA1	Dayton Heater - 125,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA2	Dayton Heater - 45,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA3	Trane HVAC - 24,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA4	Dayton Heater - 75,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA5	Dayton Heater - 75,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA6	Dayton Heater - 60,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA7	Schwank Heater - 35,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA8	Schwank Heater - 35,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA9	Schwank Heater - 35,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA10	York HVAC -245,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA11	York HVAC - 300,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached

Section DD.2: Signature Block

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.



 Authorized Signature

 10-1-2025
 Date

By:

 Jeff Salyer

 Plant Manager

 Type/Print Name of Signatory

 Title of Signatory

Division for Air Quality 300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999	DEP7007DD Insignificant Activities ___ Section DD.1: Table of Insignificant Activities ___ Section DD.2: Signature Block ___ Section DD.3: Notes, Comments, and Explanations
--	--

Source Name: Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #: 21- 043-00038

Permit #: S-10-069 R5

Agency Interest (AI) ID: 725

Date: 9/26/2025

Section DD.1: Table of Insignificant Activities

*Identify each activity with a unique Insignificant Activity number (IA #); for example: 1, 2, 3... etc.

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA12	York HVAC	245,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA13	York HVAC	300,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA14	York HVAC	245,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA15	York HVAC	245,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA16	York HVAC	135,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA17	DUO-AIR Make up	225,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA18	DUO-AIR Make up	250,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA19	DUO-AIR Make up	250,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA20	Rupp Make up	90,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA21	EVAPCO Refrigeration	5,300,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA22	EVAPCO Refrigeration	6,075,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached

Section DD.2: Signature Block

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.

By:	 Authorized Signature	<u>10-1-2025</u> Date
	Jeff Salyer Type/Print Name of Signatory	Plant Manager Title of Signatory

Division for Air Quality
 300 Sower Boulevard
 Frankfort, KY 40601
 (502) 564-3999

DEP7007DD

Insignificant Activities

Section DD.1: Table of Insignificant Activities
 Section DD.2: Signature Block
 Section DD.3: Notes, Comments, and Explanations

Source Name: Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #: 21- 043-00038

Permit #: S-10-069 R5

Agency Interest (AI) ID: 725

Date: 9/26/2025

Section DD.1: Table of Insignificant Activities

*Identify each activity with a unique Insignificant Activity number (IA #); for example: 1, 2, 3... etc.

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA23	EVAPCO Refrigeration	6,075,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA24	Lime Silo	Wastewater Treatment	401 KAR 52:040, Section 6	
IA25	Parts Washer	Maintenance	401 KAR 52:040, Section 6	
IA26	Parts Washer	Maintenance	401 KAR 52:040, Section 6	
IA27	Exhaust Vent for E.U. 5-14		401 KAR 52:040, Section 6	

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA28	Exhaust Vent for E.U. 5-14		401 KAR 52:040, Section 6	
IA29	Exhaust Vent for E.U. 5-14		401 KAR 52:040, Section 6	
IA30	Natural Gas-Fired Emergency Generator		401 KAR 60:005, Section 2(2)(eee) 401 KAR 63:002, Section 2)4)(eee)	

Section DD.2: Signature Block

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.



 Authorized Signature

By: _____
 Jeff Salyer

 Date

 Plant Manager

Division for Air Quality
 300 Sower Boulevard
 Frankfort, KY 40601
 (502) 564-3999

DEP7007GG
Control Equipment

Additional Documentation	
3	Complete Sections GG.1 through GG.12, as applicable
	Attach manufacturer's specifications for each control device
1	Complete DEP7007AI

Source Name: Smithfield Packaged Meats Corp - Grayson
 KY EIS (AFS) #: 21-043-00038
 Permit #: S-10-069 R5
 Agency Interest (AI) ID: 725
 Date: 9/25/2025

Section GG.1: General Information - Control Equipment																
Control Device ID #	Control Device Name	Cost	Manufacturer	Model Name/Serial #	Date Installed	Inlet Gas Stream Data For All Control Devices					Inlet Gas Stream Data For Condensers, Adsorbers, Afterburners, Incinerators, Oxidizers Only			Equipment Operational Data For All Control Devices		
						Temperature (°F)	Flowrate (scfm @ 68°F)	Average Particle Diameter (µm)	Particle Density (lb/ft³) or Specific Gravity	Gas Density (lb/ft³)	Gas Moisture Content (%)	Gas Composition	Fan Type	Pressure Drop Range (in H ₂ O)	Pollutants Collected/Controlled	Pollutant Removal (%)
WS1-10	Wet Scrubber 10		Schroter	DN-300	1996	180	2,437							< 2	PM, VOC	51, 2
13CD	Biogas Flare		VARBC	244W	1991	180	64								PM, VOC	99

Section GG.2: Flare Source Information

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Flare	Type of Flare (e.g. steam-assisted, air-assisted, nonassisted)	Process Gas Flowrate (acfm)	Net Heating Value of Stream(s) (Btu/scf)	Removal Efficiency (%)	Flare Rated Capacity (MMBtu/hr)
15CD	VAREC Model 244W Backup for Boiler 4 for biogas from Anaerobic wastewater Treatment Basin	nonassisted	64	600	99	4.16

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007N

Source Emissions Profile

- 3 Section N.1: Emission Summary
- 2 Section N.2: Stack Information
- N/A Section N.3: Fugitive Information
- 1 Section N.4: Notes, Comments, and Explanations

Additional Documentation

- 1 Complete DEP7007AI

Source Name:

Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #:

21-043-00038

Permit #:

S-10-069 R5

Agency Interest (AI) ID:

725

Date:

9/25/2025

N.1: Emission Summary

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour)	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential (lb/hr)	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
01	Boiler 1	1	NG Boiler	NA	NA	1	10.46 mmBtu/hr	Criteria	lb/mnrcf	AP-42						
02	Boiler 2	2	NG Boiler	NA	NA	2	10.46 mmBtu/hr	Criteria	lb/mnrcf	AP-42						
03	Boiler 3	3	NG Boiler	NA	NA	3	4.2 mmBtu/hr	Criteria	lb/mnrcf	AP-42						
04	Boiler 4	4	Biog/NG Boiler	NA	NA	4	4.19 mmBtu/hr	Criteria	lb/mnrcf	AP-42						
05	Food Processing Oven 1	5	NG Oven	Wet Scrubber	1WS	5	4.0 mmBtu/hr	Criteria	lb/mnrcf	AP-42 & Stack Test						
06	Food Processing Oven 2	6	NG Oven	Wet Scrubber	2WS	6	4.0 mmBtu/hr	Criteria	lb/mnrcf	AP-42 & Stack Test						
07	Food Processing Oven 3	7	NG Oven	Wet Scrubber	3WS	7	4.0 mmBtu/hr	Criteria	lb/mnrcf	AP-42 & Stack Test						
08	Food Processing Oven 4	8	NG Oven	Wet Scrubber	4WS	8	4.0 mmBtu/hr	Criteria	lb/mnrcf	AP-42 & Stack Test						
09	Food Processing Oven 5	9	NG Oven	Wet Scrubber	5WS	9	4.0 mmBtu/hr	Criteria	lb/mnrcf	AP-42 & Stack Test						

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007N

Source Emissions Profile

- Section N.1: Emission Summary
- Section N.2: Stack Information
- Section N.3: Fugitive Information
- Section N.4: Notes, Comments, and Explanations

Additional Documentation

Complete DEP7007AI

Smithfield Packaged Meats Corp - Grayson

21-043-00038

S-10-069 R5

725

9/25/2025

N.1: Emission Summary

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour)	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Source Factor (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential (lb/hr)	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
10	Food Processing Oven 6	10	NG Oven	Wet Scrubber	10WS	10	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
11	Food Processing Oven 7	11	NG Oven	Wet Scrubber	11WS	11	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
12	Food Processing Oven 8	12	NG Oven	Wet Scrubber	12WS	12	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
13	Food Processing Oven 9	13	NG Oven	Wet Scrubber	13WS	13	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
14	Food Processing Oven 10	14	NG Oven	Wet Scrubber	14WS	14	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
15	Smoke Generator 1	05	Natural smoking of meats	Wet Scrubber	1WS	5	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
16	Smoke Generator 2	06	Natural smoking of meats	Wet Scrubber	2WS	6	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
17	Smoke Generator 3	07	Natural smoking of meats	Wet Scrubber	3WS	7	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
18	Smoke Generator 4	08	Natural smoking of meats	Wet Scrubber	4WS	8	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						

Section N.2: Stack Information

UTM Zone: 17

Stack ID	Identify all Emission Units (with Process ID) and Control Devices that Feed to Stack	Stack Physical Data			Stack UTM Coordinates			Stack Gas Stream Data		
		Equivalent Diameter (ft)	Height (ft)	Base Elevation (ft)	Northing (m)	Easting (m)	Flowrate (acfm)	Temperature (°F)	Exit Velocity (ft/sec)	
10	EU10, EU20, Control Device 6WS	1.5	42	587.6	4246255.8	331269.771	7000	180	66.02	
11	EU11, EU21, Control Device 7WS	1.5	42	587.6	4246252.136	331269.782	7000	180	66.02	
12	EU12, EU22, Control Device 8WS	1.5	42	587.6	4246248.916	331269.802	7000	180	66.02	
13	EU13, EU23, Control Device 9WS	1.5	42	587.6	4246245.024	331270.07	7000	180	66.02	
14	EU14, EU24, Control Device 10WS	1.5	42	587.6	424241.36	331270.081	7000	180	66.02	
15CD	Anaerobic Treatment Basin (Biogas) - Flare	0.17	12	578	4246278.827	331504.433	1100	180	12.0	

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007N

Source Emissions Profile

- Section N.1: Emission Summary
- Section N.2: Stack Information
- Section N.3: Fugitive Information
- Section N.4: Notes, Comments, and Explanations

Additional Documentation

Complete DEP7007AI

Source Name:

Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #:

21-043-00038

Permit #:

S-10-069 R5

Agency Interest (AD) ID:

725

Date:

9/25/2025

N.1: Emission Summary

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour)	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential (lb/hr)	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
19	Smoke Generator 5	09	Natural smoking of meats	Wet Scrubber	5WS	9	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
20	Smoke Generator 6	10	Natural smoking of meats	Wet Scrubber	6WS	10	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
21	Smoke Generator 7	11	Natural smoking of meats	Wet Scrubber	7WS	11	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
22	Smoke Generator 8	12	Natural smoking of meats	Wet Scrubber	8WS	12	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
23	Smoke Generator 9	13	Natural smoking of meats	Wet Scrubber	9WS	13	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
24	Smoke Generator 10	14	Natural smoking of meats	Wet Scrubber	10WS	14	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
IA1-23	Insignificant Activity	IA1-23	NG HVAC			IA1-23	20,429 mmBtu/hr	Criteria	lb/mmcf	AP-42						
15CD	Biogas Flare	15CD	Biogas Flare	Biogas Flare	15CD	15CD	lb/mmcf	Criteria	lb/mmcf	AP-42						

EXHIBIT 1

PTE and Emissions Calculations

Smithfield Packaged Meats Corp Grayson, KY - Uncontrolled Potential to Emit

	Lb/Hr						Tons/YR									
	PM	PM-10	PM-2.5	SO2	NOX	VOCS	CO	Lead	PM	PM-10	PM-2.5	SO2	NOX	VOCS	CO	Lead
TOTALS	1.82	1.81	1.81	0.47	8.97	3.79	103.73	0.00	7.96	7.93	7.93	2.05	39.29	16.59	454.32	0.00
Boiler 1	0.01	0.01	0.00	0.01	1.05	0.06	0.88	0.00	0.02	0.02	0.02	0.03	4.58	0.25	3.85	0.00
Boiler 2	0.01	0.01	0.00	0.01	1.05	0.06	0.88	0.00	0.02	0.02	0.01	0.03	4.58	0.25	3.85	0.00
Boiler 3	0.00	0.00	0.00	0.00	0.42	0.02	0.35	0.00	0.01	0.01	0.01	0.01	1.82	0.10	1.53	0.00
Boiler 4 (BG)	0.08	0.08	0.08	0.42	0.20	0.03	3.70	0.00	0.37	0.37	0.37	1.82	0.86	0.12	16.22	0.00
*Boiler 4 (NG)	0.00	0.00	0.00	0.00	0.42	0.02	0.35	0.00	0.01	0.01	0.01	0.01	1.84	0.10	1.54	0.00
**Flare	0.08	0.08	0.07	0.41	0.20	0.03	3.68	0.00	0.36	0.36	0.33	1.81	0.86	0.12	16.10	0.00
10 Ovens	0.02	0.02	0.02	0.02	4.00	0.22	3.36	0.00	0.09	0.09	0.08	0.11	17.52	0.96	14.72	0.00
10 Smokers	1.71	1.71	1.71	-	-	3.29	96.20	0.00	7.49	7.49	7.49	-	-	14.41	421.36	0.00
Misc	0.01	0.00	0.01	0.01	2.04	0.11	1.72	0.00	0.05	0.02	0.04	0.05	8.95	0.49	7.52	0.00

Smithfield Packaged Meats Corp Grayson, KY - Controlled Potential to Emit

	Lb/Hr						Tons/YR									
	PM	PM-10	PM-2.5	SO2	NOX	VOCS	CO	Lead	PM	PM-10	PM-2.5	SO2	NOX	VOCS	CO	Lead
TOTALS	1.82	1.81	1.81	0.47	8.75	3.79	103.73	0.00	2.31	7.93	7.93	2.05	38.32	16.59	136.56	0.00
Boiler 1	0.01	0.01	0.00	0.01	1.05	0.06	0.88	0.00	0.02	0.02	0.02	0.03	4.58	0.25	3.85	0.00
Boiler 2	0.01	0.01	0.00	0.01	1.05	0.06	0.88	0.00	0.02	0.02	0.01	0.03	4.58	0.25	3.85	0.00
Boiler 3	0.00	0.00	0.00	0.00	0.42	0.02	0.35	0.00	0.01	0.01	0.01	0.01	1.82	0.10	1.53	0.00
Boiler 4 (BG)	0.08	0.08	0.08	0.42	0.20	0.03	3.70	0.00	0.37	0.37	0.37	1.82	0.86	0.12	16.22	0.00
*Boiler 4 (NG)	0.00	0.00	0.00	0.00	0.42	0.02	0.35	0.00	0.01	0.01	0.01	0.01	1.84	0.10	1.54	0.00
**Flare	0.08	0.08	0.07	0.41	0.20	0.03	3.68	0.00	0.36	0.36	0.33	1.81	0.86	0.12	16.10	0.00
10 Ovens	0.02	0.02	0.02	0.02	4.00	0.22	3.36	0.00	0.09	0.09	0.08	0.11	17.52	0.96	14.72	0.00
10 Smokers	1.71	1.71	1.71	-	-	3.29	96.20	0.00	1.84	7.49	7.49	-	-	14.41	103.60	0.00
Misc	0.01	0.00	0.01	0.01	2.04	0.11	1.72	0.00	0.05	0.02	0.04	0.05	8.95	0.49	7.52	0.00

Smithfield Packaged Meats Corp Grayson, KY - Actual Emissions 2024

	Lb/YR						Tons/YR									
	PM	PM-10	PM-2.5	SO2	NOX	VOCS	CO	Lead	PM	PM-10	PM-2.5	SO2	NOX	VOCS	CO	Lead
TOTALS	759.80	759.80	747.08	616	11,227	1,023	121,959	0.06	0.38	0.38	0.37	0.31	5.61	0.51	60.98	0.00
Boiler 1	9.74	9.74	8.06	11.24	1873	103.04	1574	0.01	0.00	0.00	0.00	0.01	0.94	0.05	0.79	0.00
Boiler 2	14.54	14.54	5.59	16.78	2796	154	2349	0.01	0.01	0.01	0.00	0.01	1.40	0.08	1.17	0.00
Boiler 3	12.01	12.01	9.93	13.86	2309	127.02	1940	0.01	0.01	0.01	0.00	0.01	1.15	0.06	0.97	0.00
Boiler 4 (BG)	111	111	111	549	260	36	4883	0.00	0.06	0.06	0.06	0.27	0.13	0.02	2.44	0.00
*Boiler 4 (NG)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
**Flare	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10 Ovens	6.43	6.43	5.32	23.92	3987	32.90	3349	0.02	0.00	0.00	0.00	0.01	1.98	0.00	1.67	0.00
10 Smokers	613	613	613	-	-	571	111215	-	0.31	0.31	0.31	-	-	0.29	55.61	-
Misc																

*Natural gas is only used in Boiler 4 when the digester needs heat and biogas is not available, **Flare is only operated when the boiler is down for service.

Natural Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

Name: Boiler 1 (Indirect Heat Exchanger)
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

Permit No: V-20-017
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

Type: **3**
 1 = >100 mmBtu/hr
 2 = 10-100 mm Btu/hr
 3 = < 10 mm Btu/hr
 Size: **10.46** mm Btu/hr

Fuel Type: **Natural Gas**
 Heating Value: **1000** Btu/scf
 Actual Use: **18.734** mmcf/yr

Fire type: **Normal** Tangential of Normal
 Potential Hours: **8760** hr/yr
 Actual Hours: **2388** hr/yr

Control Type: **None**
 Control Eff.: **0** %

Criteria Pollutant Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
*PM	0.52	3	0.01	0.02	9.74	0.00
**PM-10	0.52	3	0.01	0.02	9.74	0.00
***PM-2.5	0.43	3	0.00	0.02	8.06	0.00
SO2	0.6	1(1.4-2)	0.01	0.03	11.24	0.01
NOX	100	1(1.4-1)	1.05	4.58	1873	0.94
VOCs	5.5	1(1.4-2)	0.06	0.25	103.04	0.05
CO	84	1(1.4-1)	0.88	3.85	1574	0.79
Lead	5.00E-04	1(1.4-2)	5.23E-06	2.29E-05	9.37E-03	4.68E-06

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Reg or Permi	Notes				
PM	401 KAR 59:015		0.43			
SO2	401 KAR 59:015		1.93			
NOX						

GHG Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	120,000	1(1.4-2)	1,255	5,498	2,248,063	1,124
CH4	2.3	1(1.4-2)	0.02	0.11	43	0.02
N2O	2.2	1(1.4-2)	0.02	0.10	41	0.02

HAP Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.5E-02	1(1.4-3)	7.85E-04	3.44E-03	1.41	7.03E-04

Notes:

- 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
- 2 Fifth Edition, AP-42 - Air Pollution Emission Factors, table 1.4-3 (1-.52)*TOC.
- 3 EPA 2014 National Emissions Inventory Ver. 2 Tech Support Doc. July 2018

*PM (Total) = PM (Filterable) + PM (Condensable)
 **PM10 is assumed to be PM (Total)
 ***PM 2.5 (Total) = PM 2.5 (Filterable) + PM (Condensable)

Natural Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

Name: Boiler 2 (Indirect Heat Exchanger)
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

Permit No: V-20-017
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

Type:	3	1 = >100 mmBtu/hr 2 = 10-100 mm Btu/hr 3 = < 10 mm Btu/hr	Fuel Type: Natural Gas	
Size:	10.46	mm Btu/hr	Heating Value:	1000 Btu/scf
			Actual Use:	27.960 mmcf/yr
Fire type:	Normal	Tangential of Normal	Control Type:	None
Potential Hours:	8760	hr/yr	Control Eff.:	0 %
Actual Hours:	3564	hr/yr		

Criteria Pollutant Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
*PM	0.52	3	0.01	0.02	14.54	0.01
**PM-10	0.52	3	0.01	0.02	14.54	0.01
***PM-2.5	0.20	3	0.00	0.01	5.59	0.00
SO2	0.6	1(1.4-2)	0.01	0.03	16.78	0.01
NOX	100	1(1.4-1)	1.05	4.58	2796	1.40
VOCs	5.5	1(1.4-2)	0.06	0.25	154	0.08
CO	84	1(1.4-1)	0.88	3.85	2349	1.17
Lead	5.00E-04	1(1.4-2)	5.23E-06	2.29E-05	1.40E-02	6.99E-06

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Reg or Permi	Notes				
PM	401 KAR 59:015		0.43			
SO2	401 KAR 59:015		1.93			
NOX						

GHG Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	120,000	1(1.4-2)	1,255	5,498	3,355,150	1,678
CH4	2.3	1(1.4-2)	0.02	0.11	64	0.03
N2O	2.2	1(1.4-2)	0.02	0.10	62	0.03

HAP Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.5E-02	1(1.4-3)	7.85E-04	3.44E-03	2.10	1.05E-03

- Notes:
- 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
 - 2 Fifth Edition, AP-42 - Air Pollution Emission Factors, table 1.4-3 (1-.52)*TOC.
 - 3 EPA 2014 National Emissions Inventory Ver. 2 Tech Support Doc. July 2018
- *PM (Total) = PM (Filterable) + PM (Condensable)
 **PM10 is assumed to be PM (Total)
 ***PM 2.5 (Total) = PM 2.5 (Filterable) + PM (Condensable)

Natural Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

Name: Boiler 3 (Indirect Heat Exchanger)
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

Permit No: V-20-017
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

Type:	3	1 = >100 mmBtu/hr 2 = 10-100 mm Btu/hr 3 = < 10 mm Btu/hr	Fuel Type:	
Size:	4.16	mm Btu/hr	Heating Value:	1000 Btu/scf
Fire type:	Normal	Tangential of Normal	Actual Use:	23.094 mmcf/yr
Potential Hours:	8760	hr/yr	Control Type:	None
Actual Hours:	7402	hr/yr	Control Eff.:	0 %

Criteria Pollutant Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
*PM	0.52	3	0.00	0.01	12.01	0.01
**PM-10	0.52	3	0.00	0.01	12.01	0.01
***PM-2.5	0.43	3	0.00	0.01	9.93	0.00
SO2	0.6	1(1.4-2)	0.00	0.01	13.86	0.01
NOX	100	1(1.4-1)	0.42	1.82	2309	1.15
VOCs	5.5	1(1.4-2)	0.02	0.10	127.02	0.06
CO	84	1(1.4-1)	0.35	1.53	1940	0.97
Lead	5.00E-04	1(1.4-2)	2.08E-06	9.11E-06	1.15E-02	5.77E-06

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Reg or Permi	Notes				
PM	401 KAR 59:015		0.43			
SO2	401 KAR 59:015		1.93			
NOX						

GHG Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	120,000	1(1.4-2)	499	2,186	2,771,309	1,386
CH4	2.3	1(1.4-2)	0.01	0.04	53	0.03
N2O	2.2	1(1.4-2)	0.01	0.04	51	0.03

HAP Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.5E-02	1(1.4-3)	3.12E-04	1.37E-03	1.73	8.66E-04

Notes: 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
 2 Fifth Edition, AP-42 - Air Pollution Emission Factors, table 1.4-3 (1-.52)*TOC.
 3 EPA 2014 National Emissions Inventory Ver. 2 Tech Support Doc. July 2018
 *PM (Total) = PM (Filterable) + PM (Condensable)
 **PM10 is assumed to be PM (Total)
 **PM 2.5 (Total) = PM 2.5 (Filterable) + PM (Condensable)

Natural Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

Name: Boiler 4 (Indirect Heat Exchanger)
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

Permit No: V-20-017
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

Type: **3**
 1 = >100 mmBtu/hr
 2 = 10-100 mm Btu/hr
 3 = < 10 mm Btu/hr
 Size: **4.19** mm Btu/hr

Fuel Type: **Natural Gas**
 Heating Value: **1000** Btu/scf
 Actual Use: **0.000** mmcf/yr

Fire type: **Normal** Tangential of Normal
 Potential Hours: **8760** hr/yr
 Actual Hours: **0** hr/yr

Control Type: **None**
 Control Eff.: **0** %

Criteria Pollutant Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
*PM	0.52	3	0.00	0.01	0.00	0.00
**PM-10	0.52	3	0.00	0.01	0.00	0.00
***PM-2.5	0.43	3	0.00	0.01	0.00	0.00
SO2	0.6	1(1.4-2)	0.00	0.01	0.00	0.00
NOX	100	1(1.4-1)	0.42	1.84	0	0.00
VOCs	5.5	1(1.4-2)	0.02	0.10	0.00	0.00
CO	84	1(1.4-1)	0.35	1.54	0	0.00
Lead	5.00E-04	1(1.4-2)	2.10E-06	0.00	0.00E+00	0.00E+00

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Reg or Permi	Notes				
PM	401 KAR 59:015		0.43			
SO2	401 KAR 59:015		1.93			
NOX						

GHG Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	120,000	1(1.4-2)	503	2,202	0	0
CH4	2.3	1(1.4-2)	0.01	0.04	0	0.00
N2O	2.2	1(1.4-2)	0.01	0.04	0	0.00

HAP Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.5E-02	1(1.4-3)	3.14E-04	1.38E-03	0.00	0.00E+00

Notes: 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
 2 Fifth Edition, AP-42 - Air Pollution Emission Factors, table 1.4-3 (1-.52)*TOC.
 3 EPA 2014 National Emissions Inventory Ver. 2 Tech Support Doc. July 2018
 *PM (Total) = PM (Filterable) + PM (Condensable)
 **PM10 is assumed to be PM (Total)
 ***PM 2.5 (Total) = PM 2.5 (Filterable) + PM (Condensable)

Bio Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

Name: Flare Biogas
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

Permit No: V-20-017
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

Type: 1 = >100 mmBtu/hr
 2 = 10-100 mm Btu/hr
 3 = < 10 mm Btu/hr
 Size: mm Btu/hr

Fuel Type: **Biogas**
 *Heating Value: Btu/scf
 Actual Use: mmcf/yr

Fire type: Tangential of Normal
 Potential Hours: hr/yr
 Actual Hours: hr/yr

Control Type:
 Control Eff.: %

Criteria Pollutant Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
PM	17	1(2.4-5)	0.08	0.36	0	0.00
PM-10	17	1(2.4-5)	0.08	0.36	0	0.00
PM-2.5	15.3	1(2.4-5)	0.07	0.33	0	0.00
*SO2	84.35	2	0.41	1.81	0	0.00
NOX	40	1(2.4-5)	0.20	0.86	0	0.00
VOCs	5.5	1(1.4-2)	0.03	0.12	0	0.00
CO	750	1(2.4-5)	3.68	16.10	0	0.00
Lead	5.00E-04	1(1.4-2)	2.45E-06	1.07E-05	0.00E+00	0.00E+00

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Reg or Permit	Notes				
PM						
SO2						
NOX						

GHG Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	114,790	3	563	2,464	0	0
CH4	10	3	0.05	0.21	0	0.00
N2O	1.39	3	0.01	0.03	0	0.00

HAP Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.5E-02	1(1.4-3)	3.68E-04	1.61E-03	0.00	0.00E+00

Notes: * Heating Value Calculated average of 5 biogas samples (HHV dry)
 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
 2 2018 Biogas Analysis
 **SO2 EF= 510 ppm H2S/10^6 X 0.088lb/scf X 10^6 scf/mmcf X 0.9999 X 64.06/34.08 = 84.35

Natural Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

 Name: Batch Smokehouse Ovens
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

 Permit No: V-20-017
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

Type:	3	1 = >100 mmBtu/hr 2 = 10-100 mm Btu/hr 3 = < 10 mm Btu/hr	Fuel Type:	Natural Gas	
			Heating Value:	1000	Btu/scf
			Actual Use:	39.874	mmcf/yr total
Size:	4.0	mm Btu/hr each Alkar Batch Oven		3.987	mmcf/yr total (ea.)
	40.0	mm Btu/hr total for Ovens			
	10	Number of Ovens			
Fire type:	Normal	Tangential of Normal	Control Type:	Wet Scrubber	
Potential Hours:	8760	hr/yr	Control Eff.:	69	% for particulates
Actual Hours:	4992	hr/yr	Control Eff.:	85	% for VOC

Criteria Pollutant Emissions:

Pollutant	Factor		Potential to Emit each		Actual Emissions all	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
*PM	0.52	3	0.00	0.01	6.43	0.003
**PM-10	0.52	3	0.00	0.01	6.43	0.003
***PM-2.5	0.43	3	0.00	0.01	5.32	0.003
SO2	0.6	1(1.4-2)	0.00	0.01	23.92	0.012
NOX	100	1(1.4-1)	0.40	1.75	3987	1.99
VOCs	5.5	1(1.4-2)	0.02	0.10	32.90	0.016
CO	84	1(1.4-1)	0.34	1.47	3349	1.67
Lead	5.00E-04	1(1.4-2)	2.00E-06	8.76E-06	1.99E-02	9.97E-06

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Req or Permit	Notes				
PM	401 KAR 59:010 Sec 3(2), max. 3-hr avg per unit			5.89		
SOX						
NOX						

GHG Emissions:

Pollutant	Factor		Potential to Emit each		Actual Emissions all	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	120,000	1(1.4-2)	480	2,102	4,784,832	2,392
CH4	2.3	1(1.4-2)	0.01	0.04	92	0.046
N2O	2.2	1(1.4-2)	0.01	0.04	88	0.044

HAP Emissions:

Pollutant	Factor		Potential to Emit each		Actual Emissions all	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.50E-02	1(1.4-3)	3.00E-04	1.31E-03	3.0	1.50E-03

Notes:

- 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
- 2 Fifth Edition, AP-42 - Air Pollution Emission Factors, table 1.4-3 (1-.52)*TOC.
- 3 EPA 2014 National Emissions Inventory Ver. 2 Tech Support Doc. July 2018
 - *PM (Total) = PM (Filterable) + PM (Condensable)
 - **PM10 is assumed to be PM (Total)
 - **PM 2.5 (Total) = PM 2.5 (Filterable) + PM (Condensable)

Natural Smoke: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson
 Name: Smoke Units for Batch Smokehouses Permit No: V-20-017
 Location: 800 C.W. Stevens Blvd, Grayson, KY ID No: 21-043-00038
 Contact: Engineer: Eric D. Lassalle

Smoke Generator Information:

		Fuel Type: Saw Dust/Wood Chips			
Potential Hours:	8760	hr/yr	Maximum Capacity:	0.013	ton/hr each
Estimated Hours:	356	hr/yr	Actual Use:	150.29	ton/yr total
				15.029	ton/yr (ea)
Number of Smokers:	10		Control Type:	Wet Scrubber	
Max Wood Usage:	280	ton/yr	AP-42 Control Eff.:	69	% for PM
			AP 42 Control Eff.:	85	% for VOC

Criteria Pollutant Emissions:

<u>Pollutant</u>	<u>Factor</u> (lb/ton)	<u>Notes</u>	<u>Controlled Potential to Emit</u>		<u>Actual Emissions all</u>	
			(lb/hr)	(tpy)	(lb/yr)	(tpy)
PM	13.2	3	1.71	1.84	613	0.31
PM-10	13.2	3	1.71	1.84	613	0.31
PM-2.5	13.2	3	1.71	1.84	613	0.31
VOCs	25.3	3	3.29	3.54	571	0.29
CO	740	4	96.20	103.60	111215	55.61

Criteria Pollutant Restrictions:

<u>Pollutant</u>	<u>Reference</u>		<u>(max lb/hr)</u>
	<u>Reg or Permit</u>	<u>Notes</u>	
PM	401 KAR 59:010 Sec 3(2), max. 3-hr avg		5.89
VOCs			

HAP Emissions:

<u>Pollutant</u>	<u>Factor</u> (lb/mm cf)	<u>Notes</u>	<u>Potential to Emit each</u>		<u>Actual Emissions each</u>	
			(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	ND	1(9.5.2-2)	NA	NA	NA	NA

- Notes:
- 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
 2. Smithfield - Martin City MO Stack Test 11/3/2016 (CO)
 3. Grayson, KY Stack test October 2011 (PM & VOC)
 4. Smithfield - Denison, IA Stack Test Maximum CO

Natural Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

 Name: Insignificant Equipment
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

 Permit No: V-20-017
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

 Type: **3**
 1 = >100 mmBtu/hr
 2 = 10-100 mm Btu/hr
 3 = < 10 mm Btu/hr

 Size: **20.429** mm Btu/hr

 Fuel Type: **Natural Gas**
 Heating Value: **1000** Btu/scf
 Actual Use: **0.344** mmcf/yr

 Fire type: **Normal** Tangential of Normal
 Potential Hours: **8760** hr/yr
 Actual Hours: hr/yr

 Control Type: **None**
 Control Eff.: **0** %

Criteria Pollutant Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
PM	0.52	3	0.01	0.05	0	0.00
PM-10	0.20	3	0.00	0.02	0	0.00
PM-2.5	0.43	3	0.01	0.04	0	0.00
SO2	0.6	1(1.4-1)	0.01	0.05	0	0.00
NOX	100	1(1.4-1)	2.04	8.95	34	0.02
VOCs	5.5	2	0.11	0.49	2	0.00
CO	84	1(1.4-1)	1.72	7.52	29	0.01
Lead	5.00E-04	1(1.4-1)	1.02E-05	4.47E-05	1.72E-04	8.59E-08

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Reg or Permi	Notes				
PM	401 KAR 59:015		0.43			
SO2	401 KAR 59:015		1.93			
NOX						

GHG Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	120,000	1(1.4-2)	2,451	10,737	41,246	21
CH4	2.3	1(1.4-2)	0.05	0.21	1	0.00
N2O	2.2	1(1.4-2)	0.04	0.20	1	0.00

HAP Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.5E-02	1(1.4-3)	1.53E-03	6.71E-03	0.03	1.29E-05

Notes:

- 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
- 2 Fifth Edition, AP-42 - Air Pollution Emission Factors, table 1.4-3 (1-.52)*TOC.
- 3 EPA 2014 National Emissions Inventory Ver. 2 Tech Support Doc. July 2018
 PM = Condensable (0.32) + Condensable (0.20) = 0.52
 PM 2.5 Total = PM 2.5 (0.11) + Condensable (0.32) = 0.43

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007V

Applicable Requirements and Compliance

Activities

2 Section V.1: Emission and Operating Limitation(s)

1 Section V.2: Monitoring Requirements

1 Section V.3: Recordkeeping Requirements

1 Section V.4: Reporting Requirements

1 Section V.5: Testing Requirements

1 Section V.6: Notes, Comments, and Explanations

Source Name: Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #: 21- 043-00038

Permit #: S-10-069 R5

Agency Interest (AI) II 725

Date: 9/25/2025

Additional Documentation

1 Complete DEP7007AI

Section V.1: Emission and Operating Limitation(s)

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
01 & 02	Boiler 1 & 2	401 KAR 59:015	PM	< = 0.43 lb/mmBtu/hr			In compliance using natural gas
01 & 02	Boiler 1 & 2	401 KAR 59:015	Opacity				In compliance using natural gas
01 & 02	Boiler 1 & 2	401 KAR 59:015	SO2	< =1.93 lb/mmBtu/hr			In compliance using natural gas
03 & 04	Boiler 3 & 4	401 KAR 59:015	PM	< = 0.43 lb/mmBtu/hr			In compliance using natural gas
03 & 04	Boiler 3 & 4	401 KAR 59:015	Opacity				In compliance using natural gas
03 & 04	Boiler 3 & 4	401 KAR 59:015	SO2	< =1.93 lb/mmBtu/hr			In compliance using natural gas
05-14	Food Processing Ovens	401 KAR 59:015	PM	< = 5.39 lb/hr			Stack Test 10/2011

Section V.2: Monitoring Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Monitored	Description of Monitoring
01 & 02	Boiler 1 & 2	PM	401 KAR 52:040, Section 10	Natural Gas	Monitor usage and hours of operation using natural gas on a monthly basis
01 & 02	Boiler 1 & 2	Opacity	401 KAR 52:040, Section 10	Natural Gas	Monitor usage and hours of operation using natural gas on a monthly basis
01 & 02	Boiler 1 & 2	SO2	401 KAR 52:040, Section 10	Natural Gas	Monitor usage and hours of operation using natural gas on a monthly basis
03 & 04	Boiler 3 & 4	PM	401 KAR 52:040, Section 10	Natural Gas	Monitor usage and hours of operation using natural gas on a monthly basis
03 & 04	Boiler 3 & 4	Opacity	401 KAR 52:040, Section 10	Natural Gas	Monitor usage and hours of operation using natural gas on a monthly basis
03 & 04	Boiler 3 & 4	SO2	401 KAR 52:040, Section 10	Natural Gas	Monitor usage and hours of operation using natural gas on a monthly basis
05-14	Food Processing Ovens	PM	401 KAR 52:040, Section 10	Wood	Monitor the amount of wood used in the smokers and meat processed on a monthly basis.
05-14	Food Processing Ovens	Opacity	401 KAR 52:040, Section 10	Wood	Perform a qualitative visual observation of the opacity of each unit on a weekly basis. If visible emissions from any stack are greater than 20%, the permittee shall determine the opacity emissions by EPA Method and initiate an inspection of equipment for any necessary repairs.
15-24	Food Processing Ovens	CO	401 KAR 52:040, Section 10	Wood	Monitor the amount of wood used in the smokers on a monthly basis.

Section V.3: Recordkeeping Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Recorded	Description of Recordkeeping
01 & 02	Boiler 1 & 2	PM	401 KAR 52:040, Section 10	Natural Gas	Records of the amount of Natural gas used and hours of operation shall be maintained on amonthly basis.
01 & 02	Boiler 1 & 2	Opacity	401 KAR 52:040, Section 10	Natural Gas	Records of the amount of Natural gas used and hours of operation shall be maintained on amonthly basis.
01 & 02	Boiler 1 & 2	SO2	401 KAR 52:040, Section 10	Natural Gas	Records of the amount of Natural gas used and hours of operation shall be maintained on amonthly basis.
03 & 04	Boiler 3 & 4	PM	401 KAR 52:040, Section 10	Natural Gas	Records of the amount of Natural gas used and hours of operation shall be maintained on amonthly basis.
03 & 04	Boiler 3 & 4	Opacity	401 KAR 52:040, Section 10	Natural Gas	Records of the amount of Natural gas used and hours of operation shall be maintained on amonthly basis.
03 & 04	Boiler 3 & 4	SO2	401 KAR 52:040, Section 10	Natural Gas	Records of the amount of Natural gas used and hours of operation shall be maintained on amonthly basis.
05-14	Food Processing Ovens	PM	401 KAR 52:040, Section 10	Meat, Wood	Records of the amount of wood used and meat processed in the ovens combined on a monthly basis.
05-14	Food Processing Ovens	Opacity	401 KAR 52:040, Section 10	Meat, Wood	Records of the monthly log of the weekly visible emissions. If no visible emission are observed, then no further observations or records are required.
15-24	Food Processing Ovens	CO	401 KAR 52:040, Section 10	Wood	Records of the amount of wood used in the ovens combined on a monthly basis

Section V.4: Reporting Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Reported	Description of Reporting
1-15	Boilers & Food processing ovens		401 KAR 50:055 Section 1	Start ups, Shut down & malfunctions	Notify KY DEP Division of Air Quality Ashland Regional Office
1-15	Boilers & Food processing ovens		401 KAR 50:055 Section 1	Deviations	Notify KY DEP Division of Air Quality Ashland Regional Office
1-15	Boilers & Food processing ovens		401 KAR 52:040	Semi-Annual & Annual Reporting	KY DEP Division of Air Quality

Section V.5: Testing Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Tested	Description of Testing
All	All	Criteria			None



800 CW Stevens Blvd.
Grayson, KY 41143
(606) 474-3900

Good food. Responsibly.®

October 1, 2025

Kentucky Division for Air Quality
ATTN: Permit Support Section
300 Sower Blvd.
Frankfort, KY 40601

RE: Agency Interest ID: 725 Air Permit V-20-017 R1 Permit Renewal Application

To Whom It May Concern:

Enclosed is the Smithfield Packaged Meats Corp – Grayson, KY Air Permit Renewal Application and supporting documentation. No changes to the permit have been made since previous correspondence.

If you have any questions or comments do not hesitate to contact me at the number listed above.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Salyer". The signature is written in a cursive, flowing style.

Jeff Salyer, General Manager

Attachments: Original Application DEP Forms 7007AI, 7007A, 7007B, 7007DD, 7007GG, 7007N, and 7007V and Supporting documentation

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007AI

Administrative Information

- 1 Section AI.1: Source Information
- 1 Section AI.2: Applicant Information
- 1 Section AI.3: Owner Information
- 1 Section AI.4: Type of Application
- 1 Section AI.5: Other Required Information
- 1 Section AI.6: Signature Block
- 1 Section AI.7: Notes, Comments, and Explanations

Additional Documentation

- 2 Additional Documentation attached

Source Name:

Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #:

21-043-00038

Permit #:

V-20-017-R1

Agency Interest (AI) ID:

725

Date:

9/26/2025

Section AI.1: Source Information

Physical Location	Street:	800 CW Stevens Blvd.
Address:	City:	Grayson
	County:	Carler
	Zip Code:	41143
Mailing Address:	Street or P.O. Box:	800 CW Stevens Blvd.
	City:	Grayson
	State:	KY
	Zip Code:	41143

Standard Coordinates for Source Physical Location

Longitude: 82.5551 W (decimal degrees) Latitude: 38.2054 N (decimal degrees)

Primary (NAICS) Category: Meat processed from Carcasses Primary NAICS #: 311612

Classification (SIC) Category:

Sausages and Other Prepared Meats Products

Primary SIC #:

2013

Briefly discuss the type of business conducted at this site:

The facility produces spiral sliced hams.

Description of Area Surrounding Source:

Rural Area

Industrial Park

Residential Area

Urban Area

Industrial Area

Yes

No

Number of Employees:

495

Approximate distance to nearest residence or commercial property:

550 ft

Property Area:

31.2 acre

Is this source portable?

Yes

No

What other environmental permits or registrations does this source currently hold or need to obtain in Kentucky?

NPDES/KPDES:

Currently Hold

Need

N/A

Solid Waste:

Currently Hold

Need

N/A

RCRA:

Currently Hold

Need

N/A

UST:

Currently Hold

Need

N/A

Type of Regulated Waste Activity:

Mixed Waste Generator

Generator

Recycler

Other:

VSQG

U.S. Importer of Hazardous Waste

Transporter

Treatment/Storage/Disposal Facility

N/A

Section AI.2: Applicant Information

Applicant Name: Jeff Salyer

Title: (if individual) General Manager

Mailing Address: Street or P.O. Box: 800 CW Stevens Blvd

City: Grayson State: KY Zip Code: 41143

Email: (if individual) jsalyer@smithfield.com

Phone: (606) 474-3900

Technical Contact

Name: Carol Sheehy

Title: Senior Regional Environmental Health and Safety Manager

Mailing Address: Street or P.O. Box: 3065 Elliott Manor Drive

City: Mason State: OH Zip Code: 45040

Email: csheehy@smithfield.com

Phone: (513) 504-3528 513-504-7618 (M)

Air Permit Contact for Source

Name: Mike Lyons

Title: PSM Specialist

Mailing Address: Street or P.O. Box: 800 CW Stevens Blvd

City: Grayson State: KY Zip Code: 41143

Email: mlyons@smithfield.com

Phone: 740-861-4956

Section AI.3: Owner Information

Owner same as applicant

Name:

Title:

Mailing Address:

Street or P.O. Box:

City:

State:

Zip Code:

Email:

Phone:

List names of owners and officers of the company who have an interest in the company of 5% or more.

Name

Position

Section AI.4: Type of Application

Current Status:

- Title V Conditional Major State-Origin General Permit Registration None

Requested Action:

(check all that apply)

- Name Change Initial Registration Significant Revision Administrative Permit Amendment
- Renewal Permit Revised Registration Minor Revision Initial Source-wide Operating Permit
- 502(b)(10)Change Extension Request Addition of New Facility Portable Plant Relocation Notice
- Revision Off Permit Change Landfill Alternate Compliance Submittal Modification of Existing Facilities
- Ownership Change Closure

Requested Status:

- Title V Conditional Major State-Origin PSD NSR Other: _____

Is the source requesting a limitation of potential emissions?

- Yes No

Pollutant:

Requested Limit:

Pollutant:

Requested Limit:

- Particulate Matter _____ Single HAP _____
- Volatile Organic Compounds (VOC) _____ Combined HAPs _____
- Carbon Monoxide 280 tons wood use/year Air Toxics (40 CFR 68, Subpart F) _____
- Nitrogen Oxides _____ Carbon Dioxide _____
- Sulfur Dioxide _____ Greenhouse Gases (GHG) _____
- Lead _____ Other _____

For New Construction:

Proposed Start Date of Construction:

(MM/YYYY)

Proposed Operation Start-Up Date: (MM/YYYY)

For Modifications:

Proposed Start Date of Modification:

(MM/YYYY)

Proposed Operation Start-Up Date: (MM/YYYY)

Applicant is seeking coverage under a permit shield.

- Yes No

Identify any non-applicable requirements for which permit shield is sought on a separate attachment to the application.

Section A1.5 Other Required Information

Indicate the documents attached as part of this application:

- DEP7007A Indirect Heat Exchangers and Turbines
- DEP7007B Manufacturing or Processing Operations
- DEP7007C Incinerators and Waste Burners
- DEP7007F Episode Standby Plan
- DEP7007J Volatile Liquid Storage
- DEP7007K Surface Coating or Printing Operations
- DEP7007L Mineral Processes
- DEP7007M Metal Cleaning Degreasers
- DEP7007N Source Emissions Profile
- DEP7007P Perchloroethylene Dry Cleaning Systems
- DEP7007R Emission Offset Credit
- DEP7007S Service Stations
- DEP7007T Metal Plating and Surface Treatment Operations
- DEP7007V Applicable Requirements and Compliance Activities
- DEP7007Y Good Engineering Practice and Stack Height Determination
- DEP7007AA Compliance Schedule for Non-complying Emission Units
- DEP7007BB Certified Progress Report
- DEP7007CC Compliance Certification
- DEP7007DD Insignificant Activities
- DEP7007EE Internal Combustion Engines
- DEP7007FF Secondary Aluminum Processing
- DEP7007GG Control Equipment
- DEP7007HH Haul Roads
- Confidentiality Claim
- Ownership Change Form
- Secretary of State Certificate
- Flowcharts or diagrams depicting process
- Digital Line Graphs (DLG) files of buildings, roads, etc.
- Site Map
- Map or drawing depicting location of facility
- Safety Data Sheet (SDS)
- Emergency Response Plan
- Other: Emissions calculations Exhibit #1

Section A1.6: Signature Block

I, the undersigned, hereby certify under penalty of law, that I am a responsible official*, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.



 Authorized Signature

 Date 10-15-25

 Jeff Salyer

 General Manager

 Type or Printed Name of Signatory

 Title of Signatory

*Responsible official as defined by 401 KAR 52:001.

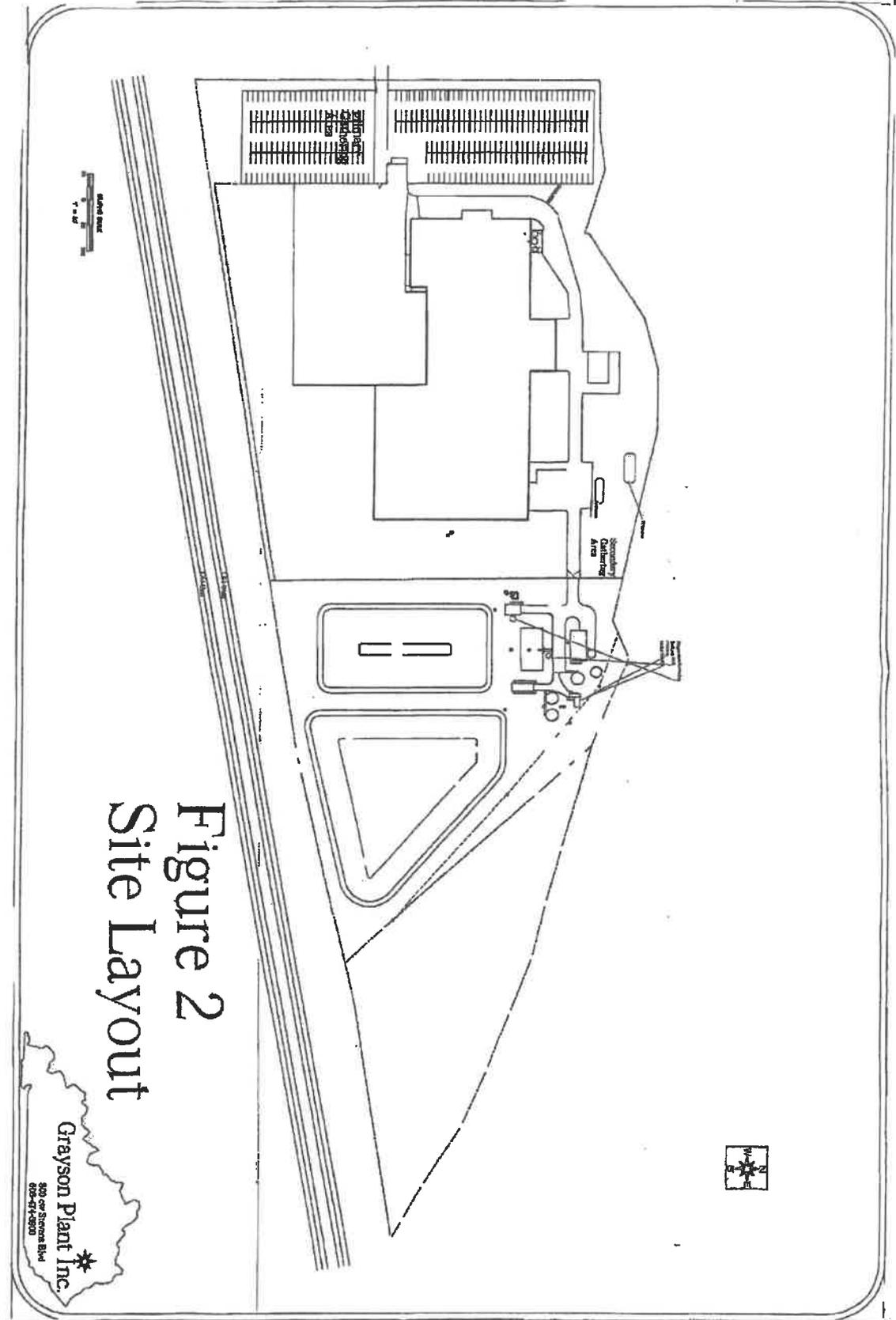
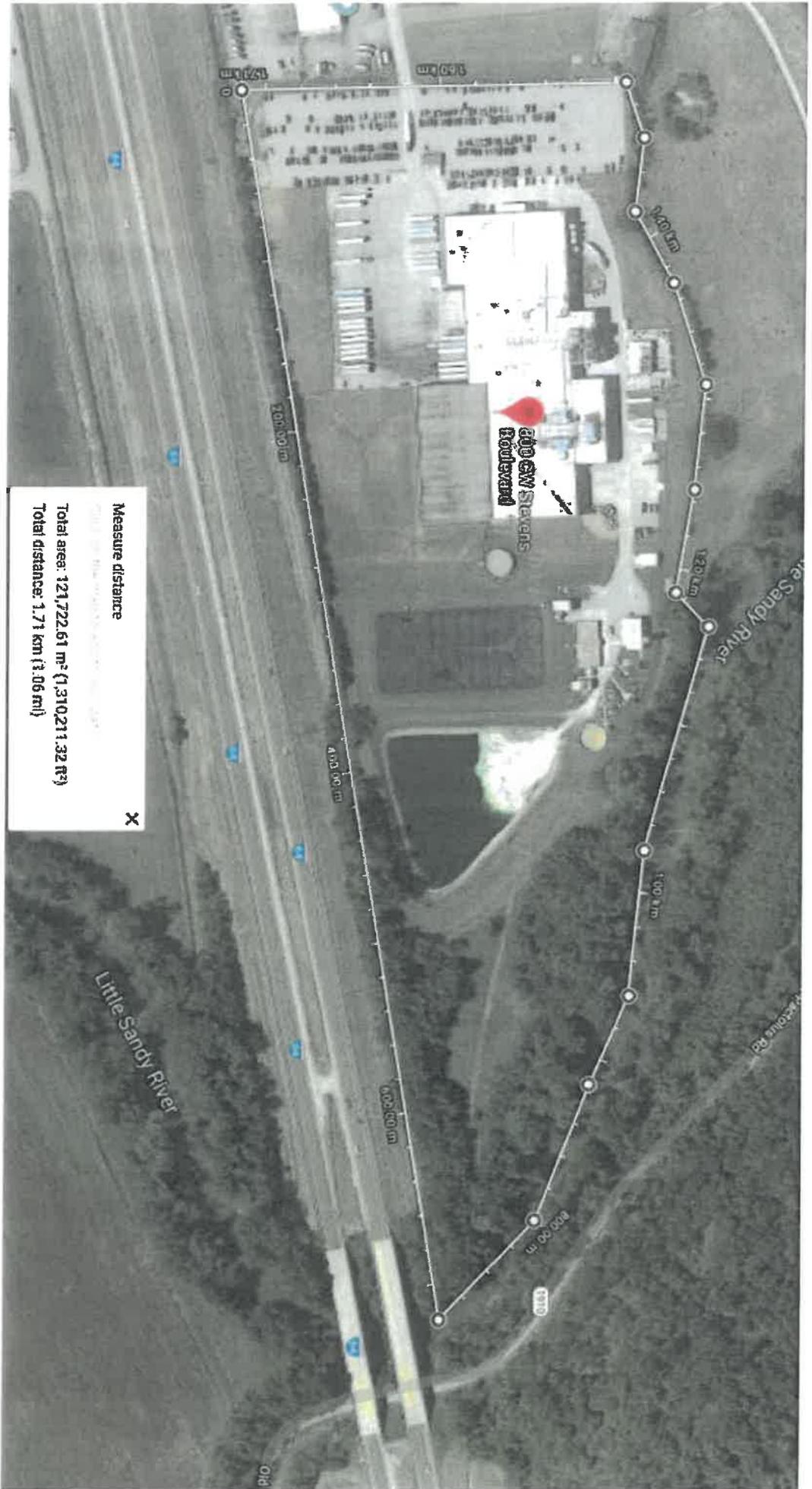


Figure 2
Site Layout

Grayson Plant Inc.
 800 SW Jackson Blvd
 32204-1500



400 SW Stevens Boulevard

Measure distance
Total area: 121,722.61 m² (1,310,211.32 ft²)
Total distance: 1.71 km (1.06 mi)

Division for Air Quality
 300 Sower Boulevard
 Frankfort, KY 40601
 (502) 564-3999

DEP7007A

Indirect Heat Exchangers and Turbines

- 2 Section A.1: General Information
- 2 Section A.2: Operating and Fuel Information
- 0 Section A.3: Notes, Comments, and Explanations

Additional Documentation
 Complete DEP7007A1, DEP7007N,
 DEP7007V, and DEP7007GG.
 Manufacturer's specifications

Source Name: Smithfield Packaged Meals Corp - Grayson

KY EIS (AFS) #: 21-043-00038

Permit #: V-20-017 R1

Agency Interest (AD) ID: 725

Date: 9/26/2025

Section A.1: General Information

Emission Unit #	Emission Unit Name	Process ID	Process Name	Identify General Type: Indirect Heat Exchanger, Gas Turbine, or Combustion Turbine	Indirect Heat Exchanger Configuration	Manufacturer	Model No./Serial No.	Proposed/Actual Date of Construction Commencement (MM/YYYY)	SCC Code	SCC Units	Control Device ID	Stack ID
01	Boiler 1	1	Boiler	Indirect Heat Exchanger		Kewanee	H3S-250-G	09/1989	10200602	MCF	N/A	01
02	Boiler 2	2	Boiler	Indirect Heat Exchanger		Kewanee	H3S-250-G	09/1989	10200602	MCF	N/A	02
03	Boiler 3	3	Boiler	Indirect Heat Exchanger		Kewanee	H3S-100-G	09/1989	10100603	MCF	N/A	03
04	Boiler 4	4	Boiler	Indirect Heat Exchanger		York Shipley	580C-H3D-100-MW030-NM/14-22810	2014	10201402	MCF	N/A	04
04	Boiler 4	4	Boiler	Indirect Heat Exchanger		York Shipley	580C-H3D-100-MW030-NM/14-22810	2014	10300603	MCF	N/A	04
05	Food Processing Oven 1	5	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	1WS	05
06	Food Processing Oven 2	6	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	2WS	06
07	Food Processing Oven 3	7	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	3WS	07
08	Food Processing Oven 4	8	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	4WS	08
09	Food Processing Oven 5	9	Oven	Direct Heat		Alkar		01/1982	30201303	MCF	5WS	09

Section A.2: Operating and Fuel Information

Emission Unit #	If multipurpose unit, identify the percentage of use by purpose				Rated Capacity Heat Input (MMBTU/hr)	Rated Capacity Power Output		Describe Operating Scenario (only if this unit will be used in different configurations)	Classify Fuel as Primary or Secondary	Identify Fuel Type: Coal, Natural Gas, Wood, Biomass, Landfill/Digester Gas, Fuel Oil # (specify 1-6), or Other	Heat Content (HHV)		Maximum Operating Hours	Ash Content (%)	Sulfur Content (%)
	Space Heat	Process Heat	Power	Emergency		(Specify units: hp, MW, or lb steam/hr)	(Specify units: Btu/lb, Btu/gal, or Btu/scf)								
01		100			10.46	250	hp		Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
02		100			10.46	250	hp		Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
03		100			4.16	100	hp		Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
04		100			4.19	100	hp		Primary	Digester Gas	600	Btu/scf	24	0	
04				100	4.19	100	hp		Secondary	Natural Gas	1000	Btu/scf	24	0	0.0006
05		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
06		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
07		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
08		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
09		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006

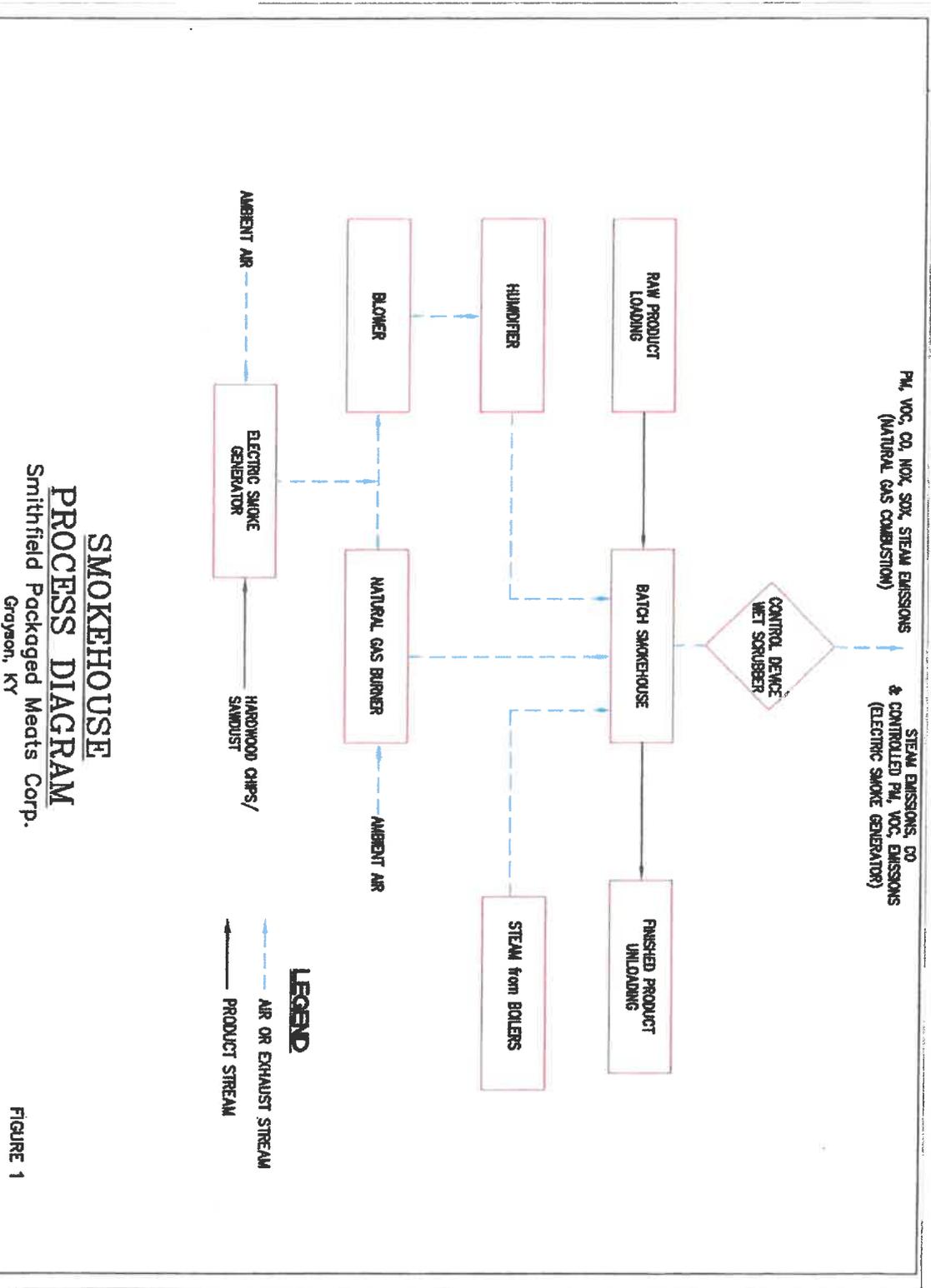
Section A.2: Operating and Fuel Information

Emission Unit #	If multipurpose unit, identify the percentage of use by purpose				Rated Capacity Heat Input (MMBTU/hr)	Rated Capacity Power Output		Describe Operating Scenario (only if this unit will be used in different configurations)	Classify Fuel as Primary or Secondary	Identify Fuel Type: Coal, Natural Gas, Wood, Biomass, Landfill/Digester Gas, Fuel Oil # (specify 1-6), or Other	Heat Content (HHV)		Maximum Operating Hours	Ash Content (%)	Sulfur Content (%)
	Space Heat	Process Heat	Power	Emergency		(Specify units: hp, MTP, or lb steam/hr)	(Specify units: Btu/lb, Btu/gal, or Btu/scf)				(Specify units: Btu/scf)				
10		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
11		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
12		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
13		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006
14		100			4.0				Primary	Natural Gas	1000	Btu/scf	24	0	0.0006

Section B.2: Materials and Fuel Information

**Maximum yearly fuel usage rate only applies if applicant request operating restrictions through federally enforceable limitations.*

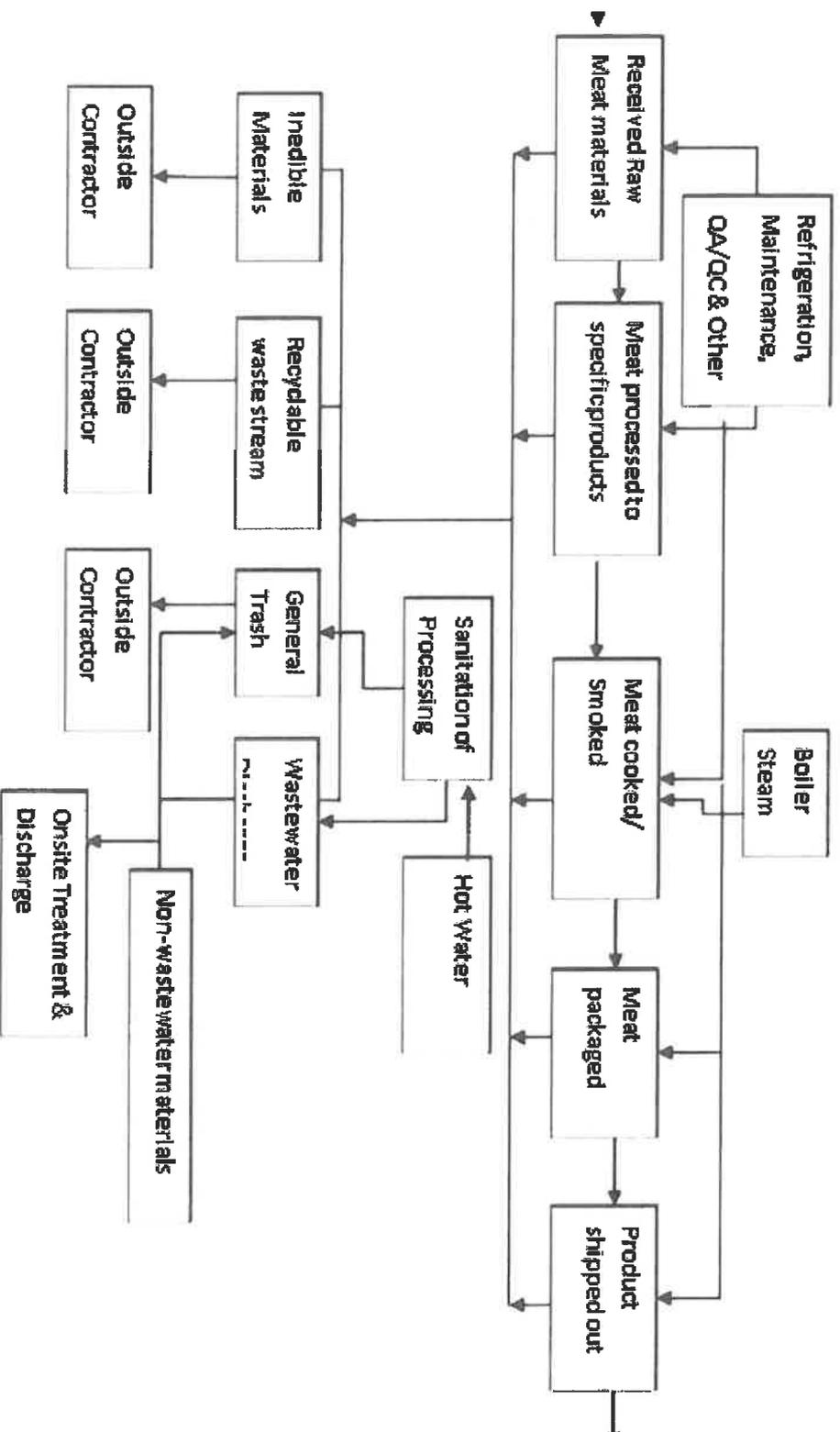
Emission Unit #	Emission Unit Name	Name of Raw Materials Input	Maximum Quantity of Each Raw Material Input		Total Process Weight Rate for Emission Unit (tons/hr)	Name of Finished Materials	Maximum Quantity of Each Finished Material Output		Fuel Type	Maximum Hourly Fuel Usage Rate		Maximum Yearly Fuel Usage Rate		Sulfur Content (%)	Ash Content (%)
			(Specify Units/hr)				(Specify Units/hr)			(Specify Units)		(Specify Units)			
15-24	Smoke Generators 1-10	Hardwood Chips		26 lb/hr	0.013	Used charred woodchips		N/A	N/A	Electric	See Notes		See Notes	Not Applicable	Not Applicable
5-14	Food Processing Ovens 1-10	Raw Meat	4400 lb/hr		2.2	Ready to Eat Meats	N/A	N/A	Natural Gas	40 mmBtu/hr	350400	mmBtu/yr	0	0.0006	



**SMOKEHOUSE
PROCESS DIAGRAM**

Smithfield Packaged Meats Corp.
Grayson, KY

FIGURE 1



Process Flow

Division for Air Quality
 300 Sower Boulevard
 Frankfort, KY 40601
 (502) 564-3999

DEP7007DD

Insignificant Activities

- 3 Section DD.1: Table of Insignificant Activities
- 3 Section DD.2: Signature Block
- 1 Section DD.3: Notes, Comments, and Explanations

Source Name: Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #: 21-043-00038

Permit #: V-20-017-R1

Agency Interest (AI) ID: 725

Date: 9/26/2025

Section DD.1: Table of Insignificant Activities

*Identify each activity with a unique Insignificant Activity number (IA #); for example: 1, 2, 3... etc.

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA1	Dayton Heater - 125,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA2	Dayton Heater - 45,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA3	Trane HVAC - 24,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA4	Dayton Heater - 75,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA5	Dayton Heater - 75,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA6	Dayton Heater - 60,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA7	Schwank Heater - 35,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA8	Schwank Heater - 35,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA9	Schwank Heater - 35,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA10	York HVAC - 245,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached
IA11	York HVAC - 300,000 Btu/hr		401 KAR 52:040, Section 6	Calculated emissions are attached

Section DD.2: Signature Block

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.



Authorized Signature

By:

Jeff Salyer

General Manager

16-15-25

Date

Type/Print Name of Signatory

Title of Signatory

Division for Air Quality
 300 Sower Boulevard
 Frankfort, KY 40601
 (502) 564-3999

DEP7007DD
 Insignificant Activities
 Section DD.1: Table of Insignificant Activities
 Section DD.2: Signature Block
 Section DD.3: Notes, Comments, and Explanations

Source Name:

Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #:

21-043-00038

Permit #:

V-20-017 R1

Agency Interest (AI) ID:

725

Date:

9/26/2025

Section DD.1: Table of Insignificant Activities

*Identify each activity with a unique Insignificant Activity number (IA #); for example: 1, 2, 3, ... etc.

Insignificant Activity #	Description of Activity Including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
--------------------------	--	--	--------------------------	----------------------

IA12	York HVAC	245,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA13	York HVAC	300,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA14	York HVAC	245,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA15	York HVAC	245,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA16	York HVAC	135,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached

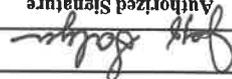
IA17	DUO-AIR Make up	225,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA18	DUO-AIR Make up	250,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA19	DUO-AIR Make up	250,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA20	Rupp Make up	90,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA21	EVAPCO Refrigeration	5,300,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA22	EVAPCO Refrigeration	6,075,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached

Section DD.2: Signature Block

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.

By:

Authorized Signature



Jeff Salver

Date

10-25-25

Title of Signatory

General Manager

Type/Print Name of Signatory

Division for Air Quality
 300 Sower Boulevard
 Frankfort, KY 40601
 (502) 564-3999

DEP7007DD

Insignificant Activities

- Section DD.1: Table of Insignificant Activities
- Section DD.2: Signature Block
- Section DD.3: Notes, Comments, and Explanations

Source Name:

Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #:

21-043-00038

Permit #:

V-20-017 R1

Agency Interest (AD) ID:

725

Date:

9/26/2025

Section DD.1: Table of Insignificant Activities

*Identify each activity with a unique Insignificant Activity number (IA #); for example: 1, 2, 3... etc.

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA23	EVAPCO Refrigeration	6,075,000 Btu/hr	401 KAR 52:040, Section 6	Calculated emissions are attached
IA24	Lime Silo	Wastewater Treatment	401 KAR 52:040, Section 6	
IA25	Parts Washer	Maintenance	401 KAR 52:040, Section 6	
IA26	Parts Washer	Maintenance	401 KAR 52:040, Section 6	
IA27	Exhaust Vent for E.U. 5-14		401 KAR 52:040, Section 6	

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
IA28	Exhaust Vent for E.U. 5-14		401 KAR 52:040, Section 6	
IA29	Exhaust Vent for E.U. 5-14		401 KAR 52:040, Section 6	
IA30	Natural Gas-Fired Emergency Generator	Generac 818,850 Btu/hr, Model SG060	401 KAR 52:040, Section 6	

Section DD.2: Signature Block

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.


 Authorized Signature

Jeff Salyer

11-25-25
 Date

General Manager

Type/Print Name of Signatory

Title of Signatory

By:

Section GG.2: Flare Source Information

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Flare	Type of Flare (e.g. steam-assisted, air-assisted, nonassisted)	Process Gas Flowrate (acfm)	Net Heating Value of Stream(s) (Btu/scf)	Removal Efficiency (%)	Flare Rated Capacity (MMBtu/hr)
15CD	VAREC Model 244W Backup for Boiler 4 for biogas from Anaerobic wastewater Treatment Basin	nonassisted	64	600	99	4.16

Division for Air Quality
 300 Sower Boulevard
 Frankfort, KY 40601
 (502) 564-3999

DEP7007N

Source Emissions Profile

- 3 Section N.1: Emission Summary
- 2 Section N.2: Stack Information
- N/A Section N.3: Fugitive Information
- 1 Section N.4: Notes, Comments, and Explanations

Additional Documentation
 1 Complete DEP7007AI

Source Name: **Smithfield Packaged Meats Corp - Grayson**

KY EIS (AFS) #: **21- 043-00038**

Permit #: **V-20-017 R1**

Agency Interest (AI) ID: **725**

Date: **9/25/2025**

N.1: Emission Summary

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour)	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g., AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential (lb/hr)	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
01	Boiler 1	1	NG Boiler	NA	NA	1	10.46 mmBtu/hr	Criteria	lb/mnct	AP-42						
02	Boiler 2	2	NG Boiler	NA	NA	2	10.46 mmBtu/hr	Criteria	lb/mnct	AP-42						
03	Boiler 3	3	NG Boiler	NA	NA	3	4.2 mmBtu/hr	Criteria	lb/mnct	AP-42						
04	Boiler 4	4	BiG/NG Boiler	NA	NA	4	4.19 mmBtu/hr	Criteria	lb/mnct	AP-42						
05	Food Processing Oven 1	5	NG Oven	Met Scrubber	1WS	5	4.0 mmBtu/hr	Criteria	lb/mnct	AP-42 & Stack Test						
06	Food Processing Oven 2	6	NG Oven	Met Scrubber	2WS	6	4.0 mmBtu/hr	Criteria	lb/mnct	AP-42 & Stack Test						
07	Food Processing Oven 3	7	NG Oven	Met Scrubber	3WS	7	4.0 mmBtu/hr	Criteria	lb/mnct	AP-42 & Stack Test						
08	Food Processing Oven 4	8	NG Oven	Met Scrubber	4WS	8	4.0 mmBtu/hr	Criteria	lb/mnct	AP-42 & Stack Test						
09	Food Processing Oven 5	9	NG Oven	Met Scrubber	5WS	9	4.0 mmBtu/hr	Criteria	lb/mnct	AP-42 & Stack Test						

Division for Air Quality 300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999	DEP7007N Source Emissions Profile ___ Section N.1: Emission Summary ___ Section N.2: Stack Information ___ Section N.3: Fugitive Information ___ Section N.4: Notes, Comments, and Explanations	Additional Documentation Complete DEP7007AI
--	--	--

Source Name: Smithfield Packaged Meats Corp - Grayson
KY EIS (AFS) #: 21-043-00038
Permit #: V-20-017 R1
Agency Interest (AI) ID: 725
Date: 9/25/2025

N.1: Emission Summary

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour)	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential (lb/hr)	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
10	Food Processing Oven 6	10	NG Oven	Wet Scrubber	10WS	10	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
11	Food Processing Oven 7	11	NG Oven	Wet Scrubber	11WS	11	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
12	Food Processing Oven 8	12	NG Oven	Wet Scrubber	12WS	12	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
13	Food Processing Oven 9	13	NG Oven	Wet Scrubber	13WS	13	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
14	Food Processing Oven 10	14	NG Oven	Wet Scrubber	14WS	14	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
15	Smoke Generator 1	05	Natural smoking of meats	Wet Scrubber	1WS	5	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
16	Smoke Generator 2	06	Natural smoking of meats	Wet Scrubber	2WS	6	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
17	Smoke Generator 3	07	Natural smoking of meats	Wet Scrubber	3WS	7	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
18	Smoke Generator 4	08	Natural smoking of meats	Wet Scrubber	4WS	8	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						

Section N.2: Stack Information

UTM Zone: 17

Stack ID	Identify all Emission Units (with Process ID) and Control Devices that Feed to Stack	Stack Physical Data			Stack UTM Coordinates		Stack Gas Stream Data		
		Equivalent Diameter (ft)	Height (ft)	Base Elevation (ft)	Northing (m)	Easting (m)	Flowrate (acfm)	Temperature (°F)	Exit Velocity (ft/sec)
1	01	1.7	37	587.6	4246284.995	331280.524	3725	375	27.35
2	02	1.7	37	587.6	4246284.995	331282.446	3725	375	27.35
3	03	1.2	37	587.6	4246284.136	331284.44	1490	400	21.96
4	04	1.2	21	578	4246283.615	331491.742	1200	180	25.46
5	EU05, EU15, Control Device 1WS	1.5	42	587.6	4246274.019	331269.191	7000	180	66.02
6	EU06, EU16, Control Device 2WS	1.5	42	587.6	4246270.465	331269.291	7000	180	66.02
7	EU07, EU17, Control Device 3WS	1.5	42	587.6	4246266.688	331269.387	7000	180	66.02
8	EU08, EU18, Control Device 4WS	1.5	42	587.6	4246263.02	331269.573	7000	180	66.02
9	EU09, EU19, Control Device 5WS	1.5	42	587.6	4246259.356	331269.583	7000	180	66.02

Section N.2: Stack Information**UTM Zone:** 17

Stack ID	Identify all Emission Units (with Process ID) and Control Devices that Feed to Stack	Stack Physical Data			Stack UTM Coordinates		Stack Gas Stream Data		
		Equivalent Diameter (ft)	Height (ft)	Base Elevation (ft)	Northing (m)	Easting (m)	Flowrate (acfm)	Temperature (°F)	Exit Velocity (ft/sec)
10	EU10, EU20, Control Device 6WS	1.5	42	587.6	4246255.8	331269.771	7000	180	66.02
11	EU11, EU21, Control Device 7WS	1.5	42	587.6	4246252.136	331269.782	7000	180	66.02
12	EU12, EU22, Control Device 8WS	1.5	42	587.6	4246249.916	331269.802	7000	180	66.02
13	EU13, EU23, Control Device 9WS	1.5	42	587.6	4246245.024	331270.07	7000	180	66.02
14	EU14, EU24, Control Device 10WS	1.5	42	587.6	424241.36	331270.081	7000	180	66.02
15CD	Anaerobic Treatment Basin (Biogas) - Flare	0.17	12	578	4246278.827	331504.433	1100	180	12.0

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007N

Source Emissions Profile

- 3 Section N.1: Emission Summary
- 2 Section N.2: Stack Information
- N/A Section N.3: Fugitive Information
- 1 Section N.4: Notes, Comments, and Explanations

Additional Documentation

- 1 Complete DEP7007AI

Source Name: Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #: 21-043-00038

Permit #: Y-20-017 R1

Agency Interest (AD) ID: 725

Date: 9/25/2025

N.1: Emission Summary

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour)	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential (lb/hr)	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
01	Boiler 1	1	NG Boiler	NA	NA	1	10.46 mmBtu/hr	Criteria	lb/mmcf	AP-42						
02	Boiler 2	2	NG Boiler	NA	NA	2	10.46 mmBtu/hr	Criteria	lb/mmcf	AP-42						
03	Boiler 3	3	NG Boiler	NA	NA	3	4.2 mmBtu/hr	Criteria	lb/mmcf	AP-42						
04	Boiler 4	4	BioG/NG Boiler	NA	NA	4	4.19 mmBtu/hr	Criteria	lb/mmcf	AP-42						
05	Food Processing Oven 1	5	NG Oven	Wet Scrubber	1WS	5	4.0 mmBtu/hr	Criteria	lb/mmcf	AP-42 & Stack Test						
06	Food Processing Oven 2	6	NG Oven	Wet Scrubber	2WS	6	4.0 mmBtu/hr	Criteria	lb/mmcf	AP-42 & Stack Test						
07	Food Processing Oven 3	7	NG Oven	Wet Scrubber	3WS	7	4.0 mmBtu/hr	Criteria	lb/mmcf	AP-42 & Stack Test						
08	Food Processing Oven 4	8	NG Oven	Wet Scrubber	4WS	8	4.0 mmBtu/hr	Criteria	lb/mmcf	AP-42 & Stack Test						
09	Food Processing Oven 5	9	NG Oven	Wet Scrubber	5WS	9	4.0 mmBtu/hr	Criteria	lb/mmcf	AP-42 & Stack Test						

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007N

Source Emissions Profile

- Section N.1: Emission Summary
- Section N.2: Stack Information
- Section N.3: Fugitive Information
- Section N.4: Notes, Comments, and Explanations

Additional Documentation

Complete DEP7007AI

Source Name: Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #: 21-043-00038

Permit #: V-20-017 R1

Agency Interest (AI) ID: 725

Date: 9/25/2025

N.1: Emission Summary

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour)	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential (lb/hr)	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
10	Food Processing Oven 6	10	NG Oven	Wet Scrubber	10WS	10	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
11	Food Processing Oven 7	11	NG Oven	Wet Scrubber	11WS	11	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
12	Food Processing Oven 8	12	NG Oven	Wet Scrubber	12WS	12	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
13	Food Processing Oven 9	13	NG Oven	Wet Scrubber	13WS	13	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
14	Food Processing Oven 10	14	NG Oven	Wet Scrubber	14WS	14	4.0 mmBtu/hr	Criteria	lb/mmBtu	AP-42 & Stack Test						
15	Smoke Generator 1	05	Natural smoking of meats	Wet Scrubber	1WS	5	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
16	Smoke Generator 2	06	Natural smoking of meats	Wet Scrubber	2WS	6	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
17	Smoke Generator 3	07	Natural smoking of meats	Wet Scrubber	3WS	7	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
18	Smoke Generator 4	08	Natural smoking of meats	Wet Scrubber	4WS	8	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						

Division for Air Quality
 300 Sower Boulevard
 Frankfort, KY 40601
 (502) 564-3999

DEP7007N

Source Emissions Profile

- Section N.1: Emission Summary
- Section N.2: Stack Information
- Section N.3: Fugitive Information
- Section N.4: Notes, Comments, and Explanations

Additional Documentation
 Complete DEP7007AI

Source Name: Smithfield Packaged Meats Corp - Grayson
KY EIS (AFS) #: 21-043-00038
Permit #: V-20-017 R1
Agency Interest (AD) ID: 725
Date: 9/25/2025

N.1: Emission Summary

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour)	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential (lb/hr)	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
19	Smoke Generator 5	09	Natural smoking of meats	Wet Scrubber	5WS	9	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
20	Smoke Generator 6	10	Natural smoking of meats	Wet Scrubber	6WS	10	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
21	Smoke Generator 7	11	Natural smoking of meats	Wet Scrubber	7WS	11	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
22	Smoke Generator 8	12	Natural smoking of meats	Wet Scrubber	8WS	12	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
23	Smoke Generator 9	13	Natural smoking of meats	Wet Scrubber	9WS	13	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
24	Smoke Generator 10	14	Natural smoking of meats	Wet Scrubber	10WS	14	0.013 ton/hr	Criteria	lb/ton	AP-42 & Stack Test						
IA1-23	Insignificant Activity	IA1-23	NG HVAC			IA1-23	20.429 mmBtu/hr	Criteria	lb/mmcf	AP-42						
15CD	Biogas Flare	15CD	Biogas Flare	Biogas Flare	15CD	15CD	lb/mmcf	Criteria	lb/mmcf	AP-42						

Section N.3: Fugitive Information

UTM Zone:

Emission Unit #	Emission Unit Name	Process ID	Area Physical Data		Area UTM Coordinates		Area Release Data	
			Length of the X Side (ft)	Length of the Y Side (ft)	Northing (m)	Easting (m)	Release Temperature (°F)	Release Height (ft)
Not Applicable								

EXHIBIT 1

PTE and Emissions Calculations

Smithfield Packaged Meats Corp Grayson, KY - Uncontrolled Potential to Emit																
	Lb/Hr						Tons/Yr									
	PM	PM-10	PM-2.5	SO2	NOX	CO	Lead	PM	PM-10	PM-2.5	SO2	NOX	VOCs	CO	Lead	
TOTALS	1.85	1.85	1.84	0.47	11.57	3.89	104.04	0.00	7.97	7.97	7.95	2.05	39.94	16.61	454.40	0.00
Boiler 1	0.01	0.01	0.00	0.01	1.05	0.06	0.88	0.00	0.02	0.02	0.02	0.03	4.58	0.25	3.85	0.00
Boiler 2	0.01	0.01	0.00	0.01	1.05	0.06	0.88	0.00	0.02	0.02	0.02	0.03	4.58	0.25	3.85	0.00
Boiler 3	0.00	0.00	0.00	0.00	0.42	0.02	0.35	0.00	0.01	0.01	0.01	0.01	1.82	0.10	1.53	0.00
Boiler 4 (BG)	0.08	0.08	0.08	0.42	0.20	0.03	3.70	0.00	0.37	0.37	0.37	1.82	0.86	0.12	16.22	0.00
Boiler 4 (NG)	0.00	0.00	0.00	0.00	0.42	0.02	0.35	0.00	0.01	0.01	0.01	0.01	1.84	0.10	1.54	0.00
**Flare	0.08	0.08	0.07	0.41	0.20	0.03	3.68	0.00	0.36	0.36	0.33	1.81	0.86	0.12	16.10	0.00
10 Ovens	0.02	0.02	0.02	0.02	4.00	0.22	3.36	0.00	0.09	0.09	0.08	0.11	17.52	0.96	14.72	0.00
10 Smokers	1.71	1.71	1.71	-	-	3.29	96.20	0.00	7.49	7.49	7.49	-	14.41	421.36	0.00	
Emergency Gen.	0.03	0.03	0.03	0.00	2.60	0.10	0.32	0.00	0.01	0.01	0.01	0.00	0.65	0.02	0.08	0.00
Misc	0.01	0.01	0.01	0.01	2.04	0.11	1.72	0.00	0.05	0.05	0.04	0.05	8.95	0.49	7.52	0.00

Smithfield Packaged Meats Corp Grayson, KY - Controlled Potential to Emit																
	Lb/Hr						Tons/Yr									
	PM	PM-10	PM-2.5	SO2	NOX	CO	Lead	PM	PM-10	PM-2.5	SO2	NOX	VOCs	CO	Lead	
TOTALS	1.85	1.84	1.84	0.47	11.34	3.89	104.04	0.00	2.32	7.94	7.94	2.05	38.97	16.61	136.64	0.00
Boiler 1	0.01	0.01	0.00	0.01	1.05	0.06	0.88	0.00	0.02	0.02	0.02	0.03	4.58	0.25	3.85	0.00
Boiler 2	0.01	0.01	0.00	0.01	1.05	0.06	0.88	0.00	0.02	0.02	0.01	0.03	4.58	0.25	3.85	0.00
Boiler 3	0.00	0.00	0.00	0.00	0.42	0.02	0.35	0.00	0.01	0.01	0.01	0.01	1.82	0.10	1.53	0.00
Boiler 4 (BG)	0.08	0.08	0.08	0.42	0.20	0.03	3.70	0.00	0.37	0.37	0.37	1.82	0.86	0.12	16.22	0.00
Boiler 4 (NG)	0.00	0.00	0.00	0.00	0.42	0.02	0.35	0.00	0.01	0.01	0.01	0.01	1.84	0.10	1.54	0.00
**Flare	0.08	0.08	0.07	0.41	0.20	0.03	3.68	0.00	0.36	0.36	0.33	1.81	0.86	0.12	16.10	0.00
10 Ovens	0.02	0.02	0.02	0.02	4.00	0.22	3.36	0.00	0.09	0.09	0.08	0.11	17.52	0.96	14.72	0.00
10 Smokers	1.71	1.71	1.71	-	-	3.29	96.20	0.00	1.84	7.49	7.49	-	14.41	103.60	0.00	
Emergency Gen.	0.03	0.03	0.03	0.00	2.60	0.10	0.32	0.00	0.01	0.01	0.01	0.00	0.65	0.02	0.08	0.00
Misc	0.01	0.00	0.01	0.01	2.04	0.11	1.72	0.00	0.05	0.02	0.04	0.05	8.95	0.49	7.52	0.00

Smithfield Packaged Meats Corp Grayson, KY - Actual Emissions 2024															
	Lb/Yr						Tons/Yr								
	PM	PM-10	PM-2.5	SO2	NOX	CO	Lead	PM	PM-10	PM-2.5	SO2	NOX	VOCs	CO	Lead
TOTALS	759.80	759.80	753.52	615	11,227	1,023	121,959	0.06	0.38	0.38	0.31	5.61	0.51	60.98	0.00
Boiler 1	9.74	9.74	8.06	11.24	1873	103.04	1574	0.01	0.00	0.00	0.01	0.94	0.05	0.79	0.00
Boiler 2	14.54	14.54	12.02	16.78	2796	154	2349	0.01	0.01	0.01	0.01	1.40	0.08	1.17	0.00
Boiler 3	12.01	12.01	9.93	13.86	2309	127.02	1940	0.01	0.01	0.00	0.01	1.15	0.06	0.97	0.00
Boiler 4 (BG)	111	111	111	549	280	36	4883	0.00	0.06	0.06	0.06	0.13	0.02	2.44	0.00
Boiler 4 (NG)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
**Flare	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10 Ovens	6.43	6.43	5.32	23.92	3987	32.90	3349	0.02	0.00	0.00	0.01	1.99	0.02	1.67	0.00
10 Smokers	613	613	613	-	-	571	111215	-	0.31	0.31	0.31	-	0.29	55.61	-
Emergency Gen.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*Natural gas is only used in Boiler 4 when the digester needs heat and biogas is not available, **Flare is only operated when the boiler is down for service.

Natural Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

Name: Boiler 1 (Indirect Heat Exchanger)
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

Permit No: V-20-017 R1
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

Type: <input type="text" value="3"/>	1 = >100 mmBtu/hr 2 = 10-100 mm Btu/hr 3 = < 10 mm Btu/hr	Fuel Type: Natural Gas
Size: <input type="text" value="10.46"/>	mm Btu/hr	Heating Value: <input type="text" value="1000"/> Btu/scf
Fire type: <input type="text" value="Normal"/>	Tangential of Normal	Actual Use: <input type="text" value="18.734"/> mmcf/yr
Potential Hours: <input type="text" value="8760"/>	hr/yr	Control Type: <input type="text" value="None"/>
Actual Hours: <input type="text" value="2388"/>	hr/yr	Control Eff.: <input type="text" value="0"/> %

Criteria Pollutant Emissions:

Pollutant	Factor (lb/mm cf)	Notes	Potential to Emit		Actual Emissions	
			(lb/hr)	(tpy)	(lb/yr)	(tpy)
*PM	0.52	3	0.01	0.02	9.74	0.00
**PM-10	0.52	3	0.01	0.02	9.74	0.00
***PM-2.5	0.43	3	0.00	0.02	8.06	0.00
SO2	0.6	1(1.4-2)	0.01	0.03	11.24	0.01
NOX	100	1(1.4-1)	1.05	4.58	1873	0.94
VOCs	5.5	1(1.4-2)	0.06	0.25	103.04	0.05
CO	84	1(1.4-1)	0.88	3.85	1574	0.79
Lead	5.00E-04	1(1.4-2)	5.23E-06	2.29E-05	9.37E-03	4.68E-06

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Req or Permit	Notes				
PM	401 KAR 59:015		0.43			
SO2	401 KAR 59:015		1.93			
NOX						

GHG Emissions:

Pollutant	Factor (lb/mm cf)	Notes	Potential to Emit		Actual Emissions	
			(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	120,000	1(1.4-2)	1,255	5,498	2,248,063	1,124
CH4	2.3	1(1.4-2)	0.02	0.11	43	0.02
N2O	2.2	1(1.4-2)	0.02	0.10	41	0.02

HAP Emissions:

Pollutant	Factor (lb/mm cf)	Notes	Potential to Emit		Actual Emissions	
			(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.5E-02	1(1.4-3)	7.85E-04	3.44E-03	1.41	7.03E-04

- Notes:
- 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
 - 2 Fifth Edition, AP-42 - Air Pollution Emission Factors, table 1.4-3 (1-.52)*TOC.
 - 3 EPA 2014 National Emissions Inventory Ver. 2 Tech Support Doc. July 2018
 - *PM (Total) = PM (Filterable) + PM (Condensable)
 - **PM10 is assumed to be PM (Total)
 - **PM 2.5 (Total) = PM 2.5 (Filterable) + PM (Condensable)

Natural Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

 Name: Boiler 2 (Indirect Heat Exchanger)
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

 Permit No: V-20-017 R1
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

Type: 3	1 = >100 mmBtu/hr 2 = 10-100 mm Btu/hr 3 = < 10 mm Btu/hr	Fuel Type: Natural Gas
Size: 10.46	mm Btu/hr	Heating Value: 1000 Btu/scf
Fire type: Normal	Tangential of Normal	Actual Use: 27.960 mmcf/yr
Potential Hours: 8760	hr/yr	Control Type: None
Actual Hours: 3564	hr/yr	Control Eff.: 0 %

Criteria Pollutant Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
*PM	0.52	3	0.01	0.02	14.54	0.01
**PM-10	0.52	3	0.01	0.02	14.54	0.01
***PM-2.5	0.43	3	0.00	0.02	12.02	0.01
SO2	0.6	1(1.4-2)	0.01	0.03	16.78	0.01
NOX	100	1(1.4-1)	1.05	4.58	2796	1.40
VOCs	5.5	1(1.4-2)	0.06	0.25	154	0.08
CO	84	1(1.4-1)	0.88	3.85	2349	1.17
Lead	5.00E-04	1(1.4-2)	5.23E-06	2.29E-05	1.40E-02	6.99E-06

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Req or Permi	Notes				
PM	401 KAR 59:015		0.43			
SO2	401 KAR 59:015		1.93			
NOX						

GHG Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	120,000	1(1.4-2)	1,255	5,498	3,355,150	1,678
CH4	2.3	1(1.4-2)	0.02	0.11	64	0.03
N2O	2.2	1(1.4-2)	0.02	0.10	62	0.03

HAP Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.5E-02	1(1.4-3)	7.85E-04	3.44E-03	2.10	1.05E-03

- Notes:
- 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
 - 2 Fifth Edition, AP-42 - Air Pollution Emission Factors, table 1.4-3 (1-.52)*TOC.
 - 3 EPA 2014 National Emissions Inventory Ver. 2 Tech Support Doc. July 2018
 - *PM (Total) = PM (Filterable) + PM (Condensable)
 - **PM10 is assumed to be PM (Total)
 - **PM 2.5 (Total) = PM 2.5 (Filterable) + PM (Condensable)

Natural Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

Name: Boiler 3 (Indirect Heat Exchanger)
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

Permit No: V-20-017 R1
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

Type:	3	1 = >100 mmBtu/hr 2 = 10-100 mm Btu/hr 3 = < 10 mm Btu/hr	Fuel Type:	
Size:	4.16	mm Btu/hr	Heating Value:	1000 Btu/scf
Fire type:	Normal	Tangential of Normal	Actual Use:	23.094 mmcf/yr
Potential Hours:	8760	hr/yr	Control Type:	None
Actual Hours:	7402	hr/yr	Control Eff.:	0 %

Criteria Pollutant Emissions:

Pollutant	Factor (lb/mm cf)	Notes	Potential to Emit		Actual Emissions	
			(lb/hr)	(tpy)	(lb/yr)	(tpy)
*PM	0.52	3	0.00	0.01	12.01	0.01
**PM-10	0.52	3	0.00	0.01	12.01	0.01
***PM-2.5	0.43	3	0.00	0.01	9.93	0.00
SO2	0.6	1(1.4-2)	0.00	0.01	13.86	0.01
NOX	100	1(1.4-1)	0.42	1.82	2309	1.15
VOCs	5.5	1(1.4-2)	0.02	0.10	127.02	0.06
CO	84	1(1.4-1)	0.35	1.53	1940	0.97
Lead	5.00E-04	1(1.4-2)	2.08E-06	9.11E-06	1.15E-02	5.77E-06

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Reg or Permi	Notes				
PM	401 KAR 59:015		0.43			
SO2	401 KAR 59:015		1.93			
NOX						

GHG Emissions:

Pollutant	Factor (lb/mm cf)	Notes	Potential to Emit		Actual Emissions	
			(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	120,000	1(1.4-2)	499	2,186	2,771,309	1,386
CH4	2.3	1(1.4-2)	0.01	0.04	53	0.03
N2O	2.2	1(1.4-2)	0.01	0.04	51	0.03

HAP Emissions:

Pollutant	Factor (lb/mm cf)	Notes	Potential to Emit		Actual Emissions	
			(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.5E-02	1(1.4-3)	3.12E-04	1.37E-03	1.73	8.66E-04

- Notes:
- 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
 - 2 Fifth Edition, AP-42 - Air Pollution Emission Factors, table 1.4-3 (1-.52)*TOC.
 - 3 EPA 2014 National Emissions Inventory Ver. 2 Tech Support Doc. July 2018
 - *PM (Total) = PM (Filterable) + PM (Condensable)
 - **PM10 is assumed to be PM (Total)
 - **PM 2.5 (Total) = PM 2.5 (Filterable) + PM (Condensable)

Natural Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

 Name: Boiler 4 (Indirect Heat Exchanger)
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

 Permit No: V-20-017 R1
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

 Type:
 1 = >100 mmBtu/hr
 2 = 10-100 mm Btu/hr
 3 = < 10 mm Btu/hr
 Size: mm Btu/hr

 Fuel Type: **Natural Gas**
 Heating Value: Btu/scf
 Actual Use: mmcf/yr

 Fire type: Tangential of Normal
 Potential Hours: hr/yr
 Actual Hours: hr/yr

 Control Type:
 Control Eff.: %

Criteria Pollutant Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
*PM	0.52	3	0.00	0.01	0.00	0.00
**PM-10	0.52	3	0.00	0.01	0.00	0.00
***PM-2.5	0.43	3	0.00	0.01	0.00	0.00
SO2	0.6	1(1.4-2)	0.00	0.01	0.00	0.00
NOX	100	1(1.4-1)	0.42	1.84	0	0.00
VOCs	5.5	1(1.4-2)	0.02	0.10	0.00	0.00
CO	84	1(1.4-1)	0.35	1.54	0	0.00
Lead	5.00E-04	1(1.4-2)	2.10E-06	0.00	0.00E+00	0.00E+00

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Reg or Permi	Notes				
PM	401 KAR 59:015		0.43			
SO2	401 KAR 59:015		1.93			
NOX						

GHG Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	120,000	1(1.4-2)	503	2,202	0	0
CH4	2.3	1(1.4-2)	0.01	0.04	0	0.00
N2O	2.2	1(1.4-2)	0.01	0.04	0	0.00

HAP Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.5E-02	1(1.4-3)	3.14E-04	1.38E-03	0.00	0.00E+00

Notes:

- 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
- 2 Fifth Edition, AP-42 - Air Pollution Emission Factors, table 1.4-3 (1-.52)*TOC.
- 3 EPA 2014 National Emissions Inventory Ver. 2 Tech Support Doc. July 2018
 - *PM (Total) = PM (Filterable) + PM (Condensable)
 - **PM10 is assumed to be PM (Total)
 - ***PM 2.5 (Total) = PM 2.5 (Filterable) + PM (Condensable)

Bio Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

Name: Boiler 4 - Wastewater Boiler Bio Gas
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

Permit No: V-20-017 R1
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

Type: <input type="text" value="3"/>	1 = >100 mmBtu/hr 2 = 10-100 mm Btu/hr 3 = < 10 mm Btu/hr	Fuel Type: <input type="text" value="Biogas"/>
Size: <input type="text" value="4.19"/>	mm Btu/hr	*Heating Value: <input type="text" value="848.7"/> Btu/scf
Fire type: <input type="text" value="Normal"/>	Tangential of Normal	Actual Use: <input type="text" value="6.51"/> mmcf/yr
Potential Hours: <input type="text" value="8760"/>	hr/yr	Control Type: <input type="text" value="None"/>
Actual Hours: <input type="text"/>	hr/yr	Control Eff.: <input type="text" value="0"/> %

Criteria Pollutant Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
PM	17	1(2,4-5)	0.08	0.37	111	0.06
PM-10	17	1(2,4-5)	0.08	0.37	111	0.06
PM-2.5	17	1(2,4-5)	0.08	0.37	111	0.06
**SO2	84.35	2	0.42	1.82	549	0.27
NOX	40	1(2,4-5)	0.20	0.86	260	0.13
VOCs	5.5	1(1,4-2)	0.03	0.12	36	0.02
CO	750	1(2,4-5)	3.70	16.22	4883	2.44
Lead	5.00E-04	1(1,4-2)	2.47E-06	1.08E-05	3.26E-03	1.63E-06

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Reg or Permi	Notes				
PM	401 KAR 59:015		0.43			
SO2	401 KAR 59:015		1.93			
NOX						

GHG Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	114,790	3	567	2,482	747,283	374
CH4	10	3	0.05	0.22	65	0.03
N2O	1.39	3	0.01	0.03	9	0.00

HAP Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.5E-02	1(1,4-3)	3.70E-04	1.62E-03	0.49	2.44E-04

Notes: * Heating Value Calculated average of 5 biogas samples (HHV dry)
 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
 2 2018 Biogas Analysis
 **SO2 EF= 510 ppm H2S/10^6 X 0.088lb/scf X 10^6 scf/mmcf X 0.9999 X 64.06/34.08 = 84.35

Bio Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

Name: Flare Biogas

Location: 800 C.W. Stevens Blvd, Grayson, KY

Contact:

Permit No: V-20-017 R1

ID No: 21-043-00038

Engineer: Eric D. Lassalle

Boiler and Fuel Information:

Type: **3**
 1 = >100 mmBtu/hr
 2 = 10-100 mm Btu/hr
 3 = < 10 mm Btu/hr

Size: **4.16** mm Btu/hr

Fuel Type: **Biogas**
 *Heating Value: **848.7** Btu/scf
 Actual Use: **0** mmcf/yr

Fire type: **Normal** Tangential of Normal
 Potential Hours: **8760** hr/yr
 Actual Hours: **0** hr/yr

Control Type: **None**
 Control Eff.: **0** %

Criteria Pollutant Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
PM	17	1(2.4-5)	0.08	0.36	0	0.00
PM-10	17	1(2.4-5)	0.08	0.36	0	0.00
PM-2.5	15.3	1(2.4-5)	0.07	0.33	0	0.00
*SO2	84.35	2	0.41	1.81	0	0.00
NOX	40	1(2.4-5)	0.20	0.86	0	0.00
VOCs	5.5	1(1.4-2)	0.03	0.12	0	0.00
CO	750	1(2.4-5)	3.68	16.10	0	0.00
Lead	5.00E-04	1(1.4-2)	2.45E-06	1.07E-05	0.00E+00	0.00E+00

Criteria Pollutant Restrictions:

Pollutant	Reference			(max lb/hr)	(lb/yr)	(tpy)
	Reg or Permit	Notes	(lb/mmBtu)			
PM						
SO2						
NOX						

GHG Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	114,790	3	563	2,464	0	0
CH4	10	3	0.05	0.21	0	0.00
N2O	1.39	3	0.01	0.03	0	0.00

HAP Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.5E-02	1(1.4-3)	3.68E-04	1.61E-03	0.00	0.00E+00

Notes:

- * Heating Value Calculated average of 5 biogas samples (HHV dry)
- 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
- 2 2018 Biogas Analysis
- **SO2 EF= 510 ppm H2S/10^6 X 0.088lb/scf X 10^6 scf/mmcf X 0.9999 X 64.06/34.08 = 84.35

Natural Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

Name: Batch Smokehouse Ovens
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

Permit No: V-20-017 R1
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

Type:	3	1 = >100 mmBtu/hr 2 = 10-100 mm Btu/hr 3 = < 10 mm Btu/hr	Fuel Type:	Natural Gas
Size:	4.0	mm Btu/hr each Alkar Batch Oven	Heating Value:	1000 Btu/scf
	40.0	mm Btu/hr total for Ovens	Actual Use:	39.874 mmcf/yr total
	10	Number of Ovens		3.987 mmcf/yr total (ea.)
Fire type:	Normal	Tangential of Normal	Control Type:	Wet Scrubber
Potential Hours:	8760	hr/yr	Control Eff.:	69 % for particulates
Actual Hours:	4992	hr/yr	Control Eff.:	85 % for VOC

Criteria Pollutant Emissions:

Pollutant	Factor		Potential to Emit each		Actual Emissions all	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
*PM	0.52	3	0.00	0.01	6.43	0.003
**PM-10	0.52	3	0.00	0.01	6.43	0.003
***PM-2.5	0.43	3	0.00	0.01	5.32	0.003
SO2	0.6	1(1.4-2)	0.00	0.01	23.92	0.012
NOX	100	1(1.4-1)	0.40	1.75	3987	1.99
VOCs	5.5	1(1.4-2)	0.02	0.10	32.90	0.016
CO	84	1(1.4-1)	0.34	1.47	3349	1.67
Lead	5.00E-04	1(1.4-2)	2.00E-06	8.76E-06	1.99E-02	9.97E-06

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Reg or Permit	Notes				
PM	401 KAR 59:010 Sec 3(2), max. 3-hr avg per unit			5.89		
SOX						
NOX						

GHG Emissions:

Pollutant	Factor		Potential to Emit each		Actual Emissions all	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	120,000	1(1.4-2)	480	2,102	4,784,832	2,392
CH4	2.3	1(1.4-2)	0.01	0.04	92	0.046
N2O	2.2	1(1.4-2)	0.01	0.04	88	0.044

HAP Emissions:

Pollutant	Factor		Potential to Emit each		Actual Emissions all	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.50E-02	1(1.4-3)	3.00E-04	1.31E-03	3.0	1.50E-03

Notes: 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
 2 Fifth Edition, AP-42 - Air Pollution Emission Factors, table 1.4-3 (1-.52)*TOC.
 3 EPA 2014 National Emissions Inventory Ver. 2 Tech Support Doc. July 2018
 *PM (Total) = PM (Filterable) + PM (Condensable)
 **PM10 is assumed to be PM (Total)
 **PM 2.5 (Total) = PM 2.5 (Filterable) + PM (Condensable)

Natural Smoke: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson
 Name: Smoke Units for Batch Smokehouses Permit No: V-20-017 R1
 Location: 800 C.W. Stevens Blvd, Grayson, KY ID No: 21-043-00038
 Contact: Engineer: Eric D. Lassalle

Smoke Generator Information:

		Fuel Type: Saw Dust/Wood Chips			
Potential Hours:	8760	hr/yr	Maximum Capacity:	0.013	ton/hr each
Estimated Hours:	356	hr/yr	Actual Use:	150.29	ton/yr total
				15.029	ton/yr (ea)
Number of Smokers:	10		Control Type:	Wet Scrubber	
Max Wood Usage:	280	ton/yr	AP-42 Control Eff.:	69	% for PM
			AP 42 Control Eff.:	85	% for VOC

Criteria Pollutant Emissions:

Pollutant	Factor		Controlled Potential to Emit		Actual Emissions all	
	(lb/ton)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
PM	13.2	3	1.71	1.84	613	0.31
PM-10	13.2	3	1.71	1.84	613	0.31
PM-2.5	13.2	3	1.71	1.84	613	0.31
VOCs	25.3	3	3.29	3.54	571	0.29
CO	740	4	96.20	103.60	111215	55.61

Criteria Pollutant Restrictions:

Pollutant	Reference		(max lb/hr)
	Req or Permit	Notes	
PM	401 KAR 59:010 Sec 3(2), max. 3-hr avg		5.89
VOCs			

HAP Emissions:

Pollutant	Factor		Potential to Emit each		Actual Emissions each	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	ND	1(9.5.2-2)	NA	NA	NA	NA

- Notes:
- 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
 2. Smithfield - Martin City MO Stack Test 11/3/2016 (CO)
 3. Grayson, KY Stack test October 2011 (PM & VOC)
 4. Smithfield - Denison, IA Stack Test Maximum CO

Natural Gas Combustion: Criteria and Toxic Air Pollutant Emissions Estimates

Facility Information: Grayson

Name: Insignificant Equipment
 Location: 800 C.W. Stevens Blvd, Grayson, KY
 Contact:

Permit No: V-20-017 R1
 ID No: 21-043-00038
 Engineer: Eric D. Lassalle

Boiler and Fuel Information:

Type:	3	1 = >100 mmBtu/hr 2 = 10-100 mm Btu/hr 3 = < 10 mm Btu/hr	Fuel Type:	Natural Gas	
Size:	20.429	mm Btu/hr	Heating Value:	1000	Btu/scf
			Actual Use:	0.344	mmcf/yr
Fire type:	Normal	Tangential of Normal	Control Type:	None	
Potential Hours:	8760	hr/yr	Control Eff.:	0	%
Actual Hours:		hr/yr			

Criteria Pollutant Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
PM	0.52	3	0.01	0.05	0	0.00
PM-10	0.52	3	0.01	0.05	0	0.00
PM-2.5	0.43	3	0.01	0.04	0	0.00
SO2	0.6	1(1.4-1)	0.01	0.05	0	0.00
NOX	100	1(1.4-1)	2.04	8.95	34	0.02
VOCs	5.5	2	0.11	0.49	2	0.00
CO	84	1(1.4-1)	1.72	7.52	29	0.01
Lead	5.00E-04	1(1.4-1)	1.02E-05	4.47E-05	1.72E-04	8.59E-08

Criteria Pollutant Restrictions:

Pollutant	Reference		(lb/mmBtu)	(max lb/hr)	(lb/yr)	(tpy)
	Req or Permi	Notes				
PM	401 KAR 59:015		0.43			
SO2	401 KAR 59:015		1.93			
NOX						

GHG Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
CO2	120,000	1(1.4-2)	2,451	10,737	41,246	21
CH4	2.3	1(1.4-2)	0.05	0.21	1	0.00
N2O	2.2	1(1.4-2)	0.04	0.20	1	0.00

HAP Emissions:

Pollutant	Factor		Potential to Emit		Actual Emissions	
	(lb/mm cf)	Notes	(lb/hr)	(tpy)	(lb/yr)	(tpy)
Formaldehyde	7.5E-02	1(1.4-3)	1.53E-03	6.71E-03	0.03	1.29E-05

Notes:

- 1 Fifth Edition, AP-42 - Air Pollution Emission Factors, table number shown in parentheses.
- 2 Fifth Edition, AP-42 - Air Pollution Emission Factors, table 1.4-3 (1-.52)*TOC.
- 3 EPA 2014 National Emissions Inventory Ver. 2 Tech Support Doc. July 2018
 PM = Condensable (0.32) + Condensable (0.20) = 0.52
 PM10 is assumed to be PM (Total)
 PM 2.5 Total = PM 2.5 (0.11) + Condensable (0.32) = 0.43

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007V

Applicable Requirements and Compliance Activities

Additional Documentation

1 Complete DEP7007AI

2 Section V.1: Emission and Operating Limitation(s)

1 Section V.2: Monitoring Requirements

1 Section V.3: Recordkeeping Requirements

1 Section V.4: Reporting Requirements

1 Section V.5: Testing Requirements

1 Section V.6: Notes, Comments, and Explanations

Source Name: Smithfield Packaged Meats Corp - Grayson

KY EIS (AFS) #: 21-043-00038

Permit #: V-20-017 R1

Agency Interest (AI) II 725

Date: 9/25/2025

Section V.1: Emission and Operating Limitation(s)

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
01 & 02	Boiler 1 & 2	401 KAR 59:015	PM	<= 0.43 lb/mmBtu/hr			In compliance using natural gas
01 & 02	Boiler 1 & 2	401 KAR 59:015	Opacity				In compliance using natural gas
01 & 02	Boiler 1 & 2	401 KAR 59:015	SO2	<= 1.93 lb/mmBtu/hr			In compliance using natural gas
03 & 04	Boiler 3 & 4	401 KAR 59:015	PM	<= 0.43 lb/mmBtu/hr			In compliance using natural gas
03 & 04	Boiler 3 & 4	401 KAR 59:015	Opacity				In compliance using natural gas
03 & 04	Boiler 3 & 4	401 KAR 59:015	SO2	<= 1.93 lb/mmBtu/hr			In compliance using natural gas
05-14	Food Processing Ovens	401 KAR 59:015	PM	<= 5.89 lb/hr			Stack Test 10/2011

Section V.2: Monitoring Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Monitored	Description of Monitoring
01 & 02	Boiler 1 & 2	PM	401 KAR 52:040, Section 10	Natural Gas	Monitor usage and hours of operation using natural gas on a monthly basis
01 & 02	Boiler 1 & 2	Opacity	401 KAR 52:040, Section 10	Natural Gas	Monitor usage and hours of operation using natural gas on a monthly basis
01 & 02	Boiler 1 & 2	SO2	401 KAR 52:040, Section 10	Natural Gas	Monitor usage and hours of operation using natural gas on a monthly basis
03 & 04	Boiler 3 & 4	PM	401 KAR 52:040, Section 10	Natural Gas	Monitor usage and hours of operation using natural gas on a monthly basis
03 & 04	Boiler 3 & 4	Opacity	401 KAR 52:040, Section 10	Natural Gas	Monitor usage and hours of operation using natural gas on a monthly basis
03 & 04	Boiler 3 & 4	SO2	401 KAR 52:040, Section 10	Natural Gas	Monitor usage and hours of operation using natural gas on a monthly basis
05-14	Food Processing Ovens	PM	401 KAR 52:040, Section 10	Wood	Monitor the amount of wood used in the smokers and meat processed on a monthly basis.
05-14	Food Processing Ovens	Opacity	401 KAR 52:040, Section 10	Wood	Perform a qualitative visual observation of the opacity of each unit on a weekly basis. If visible emissions from any stack are greater than 20%, the permittee shall determine the opacity emissions by EPA Method 9 and initiate an inspection of equipment for any necessary repairs.
15-24	Food Processing Ovens	CO	401 KAR 52:040, Section 10	Wood	Monitor the amount of wood used in the smokers on a monthly basis.

Section V.3: Recordkeeping Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Recorded	Description of Recordkeeping
01 & 02	Boiler 1 & 2	PM	401 KAR 52:040, Section 10	Natural Gas	Records of the amount of Natural gas used and hours of operation shall be maintained on amonthly basis.
01 & 02	Boiler 1 & 2	Opacity	401 KAR 52:040, Section 10	Natural Gas	Records of the amount of Natural gas used and hours of operation shall be maintained on amonthly basis.
01 & 02	Boiler 1 & 2	SO2	401 KAR 52:040, Section 10	Natural Gas	Records of the amount of Natural gas used and hours of operation shall be maintained on amonthly basis.
03 & 04	Boiler 3 & 4	PM	401 KAR 52:040, Section 10	Natural Gas	Records of the amount of Natural gas used and hours of operation shall be maintained on amonthly basis.
03 & 04	Boiler 3 & 4	Opacity	401 KAR 52:040, Section 10	Natural Gas	Records of the amount of Natural gas used and hours of operation shall be maintained on amonthly basis.
03 & 04	Boiler 3 & 4	SO2	401 KAR 52:040, Section 10	Natural Gas	Records of the amount of Natural gas used and hours of operation shall be maintained on amonthly basis.
05-14	Food Processing Ovens	PM	401 KAR 52:040, Section 10	Meat, Wood	Records of the amount of wood used and meat processed in the ovens combined on a monthly basis.
05-14	Food Processing Ovens	Opacity	401 KAR 52:040, Section 10	Meat, Wood	Records of the monthly log of the weekly visible emissions. If no visible emissions are observed, then no further observations or records are required.
15-24	Food Processing Ovens	CO	401 KAR 52:040, Section 10	Wood	Records of the amount of wood used in the ovens combined on a monthly basis.

Section V.4: Reporting Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Reported	Description of Reporting
1-15	Boilers & Food processing ovens		401 KAR 50:055 Section 1	Start ups, Shut down & malfunctions	Notify KY DEP Division of Air Quality Ashland Regional Office
1-15	Boilers & Food processing ovens		401 KAR 50:055 Section 1	Deviations	Notify KY DEP Division of Air Quality Ashland Regional Office
1-15	Boilers & Food processing ovens		401 KAR 52:040	Semi-Annual & Annual Reporting	KY DEP Division of Air Quality

Section V.5: Testing Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Tested	Description of Testing
All	All	Criteria			None

RE: Courtesy Draft Permit Copy, AFS 21-043-0003 Smithfield Package Meats Corp - Grayson

From Lyons, Mike <mlyons@smithfield.com>

Date Wed 1/21/2026 3:59 PM

To Porter, Ken (EEC) <ken.porter@ky.gov>

 1 attachment (29 KB)

Insignificant activities - Copy.docx;

This Message Originated from Outside the Organization

This Message Is From an External Sender.

Report Suspicious

Ken

Our Engineer updated the insignificant activities.

Smithfield.
Good food. Responsibly.®

Mike Lyons
PSM Specialist
c: (740) 861-4956
e: mlyons@smithfield.com
800 CW Stevens Blvd.
Grayson, KY 41143
smithfieldfoods.com

From: Porter, Ken (EEC) <ken.porter@ky.gov>

Sent: Friday, January 16, 2026 8:04 AM

To: Salyer, Jeff <jsalyer@smithfield.com>; Lyons, Mike <mlyons@smithfield.com>

Cc: Porter, Ken (EEC) <ken.porter@ky.gov>; Daniels, Stacie (EEC) <stacie.daniels@ky.gov>

Subject: Courtesy Draft Permit Copy, AFS 21-043-0003 Smithfield Package Meats Corp - Grayson

All:

Please find attached a courtesy draft copy of the significant revision Title V permit for Smithfield Package Meats Corp - Grayson. Please submit any written questions or comments no later than January 26, 2026, so that the Division may continue processing the permitting action. Any submitted questions and comments will be part of the public permitting record and considered disclosable under the Kentucky Open Records Act. Be advised that the draft permit may differ from the attached even if there are no questions or comments as the permit package will undergo additional internal reviews and approvals."

Thank you,

Ken Porter

Environmental Engineer Technologist II

Permit Review Branch - Combustion Section
Division for Air Quality
300 Sower Blvd
Frankfort, KY 40601
Phone: 502-782-1177
Email: ken.porter@ky.gov

This communication (including any attachments) is confidential and is intended to be privileged pursuant to applicable law. If you are not the intended recipient, or the employee or agent responsible for delivering it to the intended recipient, then you are hereby notified that the dissemination, distribution or copying of this communication is prohibited. If you received this communication in error, please notify Smithfield Foods, Inc. immediately by telephone (+1 757-365-3000) and then delete this communication and destroy all copies thereof.

EPA Air Emissions Permit #: V-25-031 Section C - Insignificant Activities				Nat Gas Heat HVAC Units/ Gas Heaters/ HMAU's							
Emission Units				1. General Appliance Information							
KY EIS ID	Plant	Description	Rating (BTU)	Generally Applicable Regulation	Appliance ID	Appliance Location		Appliance Description	Manufacturer	Model #	Serial #
						Area	Building				
IAOI	IAOI	Dayton Heater	90,000	401 KAR 59:010 & 401 KAR 63:020	Nat. Gas Heater	40X60	40X60	Natural Gas Heater	Dayton	2RYV2	
	IA02	Dayton Heater	45,000		Nat. Gas Heater	Pre-Treatment	WWTP	Natural Gas Heater	Dayton	2RYU8	
	IA03	Bryant HVAC	24,000		WWTP	Roof	WWTP Bldg.	AC & Nat. Gas Package Unit	BRYANT	577CNWC24060	
	IA04	Dayton Heater	75,000		Nat. Gas Heater	40X60	40X60	Natural Gas Heater	Dayton	3E227E	
	IA05	Dayton Heater	60,000		Nat. Gas Heater	Parts Room	Main Bldg.	Natural Gas Heater	Dayton	3E133E	
	IA06	Dayton Heater	60,000		Nat. Gas Heater	Warehouse	Main BLDG.	Natural Gas Heater	Dayton	3E113E	
	IA07	Dayton Heater	100,000		Nat. Gas Heater	WWTP Office	WWTP	Natural Gas Heater	Dayton	2RXV4	
	IA08	Dayton Heater	35,000		Nat. Gas Heater	Parts Room	Main Bldg.	Natural Gas Heater	Dayton		
	IA09	Dayton Heater	35,000		Nat. Gas Heater	Warehouse	Main Bldg.	Natural Gas Heater	Dayton		
	IAIO	Bryant HVAC	245,000		Women's Locker Room #1	Roof	Main Bldg.	AC & Nat. Gas Package Unit	BRYANT	580JE12N224A2A0AAA	2319P30509
	(All	York HVAC	300,000		East Cafeteria #2	Roof	Main Bldg.	AC & Nat. Gas Package Unit	YORK	ZF180N24A4AAAIB	NIE2828706
	IA12	York HVAC	245,000		West Cafeteria #3	Roof	Main Bldg.	AC & Nat. Gas Package Unit	YORK	ZF150N24D4AIBAAIA1	NI 66003563
	IA13	Bryant HVAC	300,000		Men's Locker Room #4	Roof	Main Bldg.	AC & Nat. Gas Package Unit	BRYANT	580JE12N224A2A0AAA	2919P99150
	IA14	Bryant HVAC	245,000		South office #5	Roof	Main Bldg.	AC & Nat. Gas Package Unit	BRYANT	580JE12N224A2A0AAA	341939307
	IA15	York HVAC	245,000		North Office #6	Roof	Main Bldg.	AC & Nat. Gas Package Unit	YORK	ZF120N20N4AAA5A	NI 82540179
	IA16	York HVAC	135,000		Lab #7	Roof	Main Bldg.	AC & Nat. Gas Package Unit	YORK	PCG4B481254XIA	WIM6166011
	IA17	Greenheck Make-Up	225,000		HMAU	Roof	Main Bldg.	HMAU - FPO North	Greenheck	TSU-225-H50	21126554
	IA18	Greenheck Make-Up	250,000		HMAU	Roof	Main Bldg.	HMAU - FPO South	Greenheck	TSU-225-H50	21126544
	IA19	DUO-Aire Make-Up	250,000		HMAU	Roof	Main Bldg.	HMIJAU - Box Mezz	Duo-Aire	MB-225	12360-1
	IA20	Rupp Make-Up	90,000		HMAU	Roof	Main Bldg.	HMIJAU - Tree Wash	Rupp	RAM 20	
	IA21	EVAPCO Refrigeration	5,300,000		RMAU	Roof	Main Bldg.	AHU-78	Evapco	CPA-56-95-CED	8-334215
	IA22	EVAPCO Refrigeration	6,075,000		RMAU	Roof	Main Bldg.	AHU-79	Evapco	CPA-60-95-CED	8-334217
	IA23	EVAPCO Refrigeration	6,075,000		RMAU	Roof	Main Bldg.	AHU-80	Evapco	CPA-60-95-CED	8-334216
IA02	IA24	Lime Silo	N/A	N/A	Lime Silo	WWTP	Office Bldg.	Lime Silo			
	IA25	Parts Washer	N/A	N/A	Parts Washer		40x60	Parts Washer			
	IA26	Parts Washer	N/A	N/A	Parts Washer	Maint. Shop	Main Bldg.	Parts Washer			
	IA27	Exhaust Vent for Ovens (EU05 - EU14)	N/A	N/A	Exhaust Vent	Roof	Main Bldg.	Exhaust Vent for Ovens - Post FPO			

IA28	Exhaust Vent for Ovens (EU05 - EU14)	N/A	N/A	Exhaust Vent	Roof	Main Bldg.	Exhaust Vent for Ovens - North			
IA29	Exhaust Vent for Ovens (EU05 - EU14)	N/A		Exhaust Vent	Roof	Main Bldg.	Exhaust Vent for Ovens - South			