

STATEMENT OF BASIS

For the issuance of Air Permit # 1745-AR-7 AFIN: 04-00095

1. PERMITTING AUTHORITY:

Division of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT:

Simmons Pet Food, Inc.
316 N. Hico St.
Siloam Springs, Arkansas 72761

3. PERMIT WRITER:

Sarah Neoh

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Poultry Processing
NAICS Code: 311615

5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision.

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
9/22/2022	Deminimis	Add a 4.2 MMBtu/hr Hot Water Heater (SN-13)
9/20/2022	Modification	Add a 250 HP Emergency Fire Pump (SN-12)

6. REVIEWER'S NOTES:

Simmons Pet Food, Inc. operates a chicken processing and pet food plant located at 316 N. Hico Street, Siloam Springs, Arkansas 72761. This permit modification adds adds two sources:

- 250 HP Emergency Fire Pump (SN-12)
- 4.2 MMBtu/hr Hot Water Heater (SN-13)

Permitted emissions will be increasing as follows: PM/PM₁₀ 0.3 tpy, SO₂ 0.3 tpy, VOC 0.2 tpy, CO 1.7 tpy, NO_x 2.3 tpy, and total HAPs 0.04 tpy.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

The most recent CAO is dated March 8, 2022. The order states that the respondent failed to submit a permit modification application to DEQ to add 2.0 MMBtu/hr IR Grill (SN-09) and 30.938 MMBtu/hr (SN-11) to the permit prior to the construction of the sources.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? **N**
 If yes, were GHG emission increases significant? **N/A**

b) Is the facility categorized as a major source for PSD? **N**

- *Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list*

If yes for 8(b), explain why this permit modification is not PSD.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-01, SN-02, SN-07, SN-10, and SN-11, SN-13	NO _x	40 C.F.R. § 60, Subpart Dc
SN-12	HAPs	40 C.F.R. § 63, Subpart ZZZZ 40 C.F.R. § 60, Subpart IIII

10. UNCONSTRUCTED SOURCES:

Unconstructed Source	Permit Approval Date	Extension Requested Date	Extension Approval Date	If Greater than 18 Months without Approval, List Reason for Continued Inclusion in Permit
N/A				

11. PERMIT SHIELD – TITLE V PERMITS ONLY: N/A

12. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY: N/A

13. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

14. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the DEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

The non-criteria pollutants listed below were evaluated. Based on Division of Environmental Quality procedures for review of non-criteria pollutants, emissions of all other non-criteria pollutants are below thresholds of concern.

1st Tier Screening (PAER)

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Division of Environmental Quality has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m³), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m ³)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
POM	0.2	0.022	1.63E-03	Y
Arsenic Compounds	0.005	0.00055	2.75E-05	Y
Beryllium Compounds	0.00005	0.0000055	1.65E-06	Y
Cadmium Compounds	0.002	0.00022	1.51E-04	Y
Chromium Compounds	0.003	0.00033	1.92E-04	Y
Cobalt Compounds	0.02	0.0022	1.15E-05	Y
Manganese Compounds	0.1	0.011	5.22E-05	Y
Mercury Compounds	0.025	0.00275	3.57E-05	Y

Pollutant	TLV (mg/m ³)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Nickel Compounds	0.1	0.011	2.88E-04	Y
Selenium Compounds	0.2	0.022	3.30E-06	Y

c) H₂S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H₂S Standards Y
 If exempt, explain: This facility does not produce H₂S

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01, 02, 07-11, 13	AP-42 for Natural Gas combustion, Uncontrolled Small Boilers (<100)	Varied	None	N/A	N/A

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
N/A				

17. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
N/A				

18. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
01, 02, 07-11, 13	Natural gas usage	1,202,936,941 scf	Monthly	N
01, 02, 07-11, 13	Fuel supply certification	N/A	Monthly	N
01, 02, 07-11, 12, 13	Amount of each fuel combusted	N/A	Operating day or Calendar month	N
12	Diesel fuel usage	N/A	Monthly	N
	Hours of operation	500	Monthly	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01, 02, 06, 07-11, 13	5%	Department Guidance	Observation
12	20%	Department Guidance	Observation

20. DELETED CONDITIONS:

Former SC	Justification for removal
	None.

21. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Hot Oil Heater (2.5 MMBtu/hr)	A-1	0.01	0.01	0.01	0.01	1.07		0.01
Makeup Air Unit (MAU) 1 (3.12 MMBtu/hr)	A-1	0.01	0.01	0.01	0.01	1.34		0.01
MAU 2 (3.768 MMBtu/hr)	A-1	0.02	0.01	0.02	0.02	1.62		0.02
MAU 3 (3.768 MMBtu/hr)	A-1	0.02	0.01	0.02	0.02	1.62		0.02
MAU 4 (2.6 MMBtu/hr)	A-1	0.01	0.01	0.01	0.01	1.12		0.01

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
MAU 5 (2.6 MMBtu/hr)	A-1	0.01	0.01	0.01	0.01	1.12		0.01
MAU 6 (2.335 MMBtu/hr)	A-1	0.01	0.01	0.01	0.01	1.00		0.01
MAU 7 (2.335 MMBtu/hr)	A-1	0.01	0.01	0.01	0.01	1.00		0.01
Diesel Storage Tanks (2)	A-3			0.01				
Laser Code Dater	A-13							
Bone Blower Loadout Spout	A-13	3.54						

22. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
1745-AR-6

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 03-11-16

Simmons Pet Food, Inc
 Permit Number: 1745-AR-7
 AFIN: 04-00095

			Old Permit	New Permit
\$/ton factor	27.27	Permit Predominant Air Contaminant	55.5	57.8
Minimum Fee \$	400	Net Predominant Air Contaminant Increase	2.3	
Minimum Initial Fee \$	500			
Check if Administrative Amendment	<input type="checkbox"/>	Permit Fee \$	400	
		Annual Chargeable Emissions (tpy)	57.8	

Pollutant (tpy)	Old Permit	New Permit	Change
PM	4.5	4.8	0.3
PM ₁₀	4.5	4.8	0.3
PM _{2.5}	0	0	0
SO ₂	0.7	1	0.3
VOC	3.4	3.6	0.2
CO	46.7	48.4	1.7
NO _x	55.5	57.8	2.3
Total HAP	0.53	0.57	0.04