

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1745-AR-8 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:

Thamoda Crossen

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
7/10/2023	Deminimis	Adding two natural gas fired hot water heaters and moving MAU to SN-14.

6. REVIEWER'S NOTES:

This De Minimis modification, the facility is adding two 0.6 MMBtu/hr natural gas-fired hot water heaters to the Permit's Group A-1 Insignificant Activities List. Then moving a 3.768 MMBtu/hr process makeup air unit (MAU) from the Permit's Group A-1 Insignificant Activities List to the list of named sources, as SN-14.

Permitted emissions will be increasing as follows: PM/PM₁₀ 0.2 tpy, SO₂ 0.1 tpy, VOC 0.1 tpy, CO 1.4 tpy, NO_x 1.7 tpy, and total HAPs 0.03 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

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, SN-14	NOX	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:

Did the facility request a permit shield in this application? N

(Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Rule 18 requirement.)

If yes, are applicable requirements included and specifically identified in the permit? N

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

List sources potentially subject to CAM because they use a control device to achieve compliance and have pre-control emissions of at least 100 percent of the major source level. List the pollutant of concern and a brief summary of the CAM plan (temperature monitoring, CEMs, opacity monitoring, etc.) and frequency requirements of § 64.

Source	Pollutant Controlled	Cite Exemption or CAM Plan Monitoring and Frequency
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	2.82E-05	Y

Pollutant	TLV (mg/m ³)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Beryllium Compounds	32.0	3.52	1.69E-06	Y
Cadmium Compounds	0.002	0.00022	1.5506E-04	Y
Chromium Compounds	0.5	0.055	1.97E-04	Y
Cobalt Compounds	0.02	0.0022	1.18E-05	Y
Manganese Compounds	5.0	0.55	5.36E-05	Y
Mercury Compounds	0.01	0.0011	3.66E-05	Y
Nickel Compounds	0.1	0.011	1.06E-03	Y
Selenium Compounds	0.2	0.022	3.38E-06	Y

2nd Tier Screening (PAIL)

AERMOD air dispersion modeling was performed on the estimated hourly emissions from the following sources, in order to predict ambient concentrations beyond the property boundary. The Presumptively Acceptable Impact Level (PAIL) for each compound has been deemed by the Department to be one one-hundredth of the Threshold Limit Value as listed by the ACGIH.

Pollutant	PAIL (µg/m ³) = 1/100 of Threshold Limit Value	Modeled Concentration (µg/m ³)	Pass?
N/A			

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
14	AP-42 for Natural Gas combustion, Uncontrolled Small Boilers	PM/ PM ₁₀ = 7.6 SO ₂ = 0.6 VOC = 5.5 CO = 84 NO _x = 100	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, 14	Natural gas usage	1,235,300,160 scf/yr	Monthly	N
01, 02, 07-11, 13, 14	Fuel supply certification	N/A	Monthly	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
01, 02, 07-11, 12, 13, 14	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, 14	5%	Department Guidance	Observation
12	20%	Department Guidance	Observation

20. DELETED CONDITIONS:

Former SC	Justification for removal
	N/A

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	0.08	0.01	0.06	0.90	1.07	-	0.02
Makeup Air Unit (MAU) 1 (3.12 MMBtu/hr)	A-1	0.10	0.01	0.07	1.13	1.34	-	0.01
MAU 2 (3.768 MMBtu/hr)	A-1	0.12	0.01	0.09	1.36	1.62	-	0.02
MAU 3 (2.6 MMBtu/hr)	A-1	0.08	0.01	0.06	0.94	1.12	-	0.01
MAU 4 (2.6 MMBtu/hr)	A-1	0.08	0.01	0.06	0.94	1.12	-	0.01
MAU 5 (2.335 MMBtu/hr)	A-1	0.08	0.01	0.01	0.01	1.00	-	0.01
MAU 6 (2.335 MMBtu/hr)	A-1	0.08	0.01	0.01	0.01	1.00	-	0.01
Hot Water Heater (0.6 MMBtu/hr)	A-1	0.02	0.01	0.01	0.22	0.26	-	0.01

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Hot Water Heater (0.6 MMBtu/hr)	A-1	0.02	0.01	0.01	0.22	0.26	-	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-7

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

