

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1709-AR-5 AFIN: 62-00125

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Boar's Head Provisions Co., Inc.
2530 West Broadway
Forrest City, Arkansas 72335

3. PERMIT WRITER:

Kyle Crane

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Meat Processed from Carcasses
NAICS Code: 311612

5. ALL SUBMITTALS:

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
6/16/2017	Modification	Addition of a direct fire water heater SN-09, removal of emergency generator SN-05

6. REVIEWER'S NOTES:

Boar's Head Provisions Co., Inc. owns and operates a food manufacturing facility in Forrest City. The facility manufactures various types of deli meats (NAICS Code 311612). An application was submitted to ADEQ to modify the permit to add a water heater as a new emissions source (SN-09). Conditions for Emergency Generator SN-05 have also been removed, as the equipment has been removed from the facility. Emission calculations for all sources were re-evaluated and updated to include HAPs. Annual permitted emissions increase by 15.0 tons per year (tpy) of CO, 0.04 tpy of lead, and 0.72

tpy of Total HAP. Annual permitted emissions decrease by 0.1 tpy of PM, 1.1 tpy of PM₁₀, 23.3 tpy of SO₂, and 20.2 tpy of NO_x.

7. COMPLIANCE STATUS:

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

This facility was last inspected on August 2, 2017 and was found to be in compliance.

8. PSD APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? 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, explain why this permit modification is not PSD.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
01 & 02	Recordkeeping	NSPS 40 CFR Part 60 Subpart Dc
04 & 06	PM/PM ₁₀ , VOC, CO	NESHAP 40 CFR Part 63 Subpart ZZZZ
07	N/A	NESHAP 40 CFR Part 63 Subpart CCCCC

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. AMBIENT AIR EVALUATIONS:

a) Non-Criteria Pollutants:

The non-criteria pollutants listed below were evaluated. Based on Department 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 Department

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?
Acrolein	0.2	0.022	0.016753	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?
None			

b) 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 emit H₂S

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01-02	AP-42 1.4 Nat. Gas	PM/PM ₁₀ 7.6 lb/MMscf SO ₂ 0.6 lb/MMscf VOC 5.5 lb/MMscf CO 84 lb/MMscf NO _x 100 lb/MMscf Lead 0.0005 lb/MMscf Total HAP 1.89 lb/MMscf			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01-02	AP-42 1.3 Fuel Oil	PM 2.0 lb/10 ³ gal PM ₁₀ 1.0 lb/10 ³ gal SO ₂ 71.0 lb/10 ³ gal VOC 0.252 lb/10 ³ gal CO 5.0 lb/10 ³ gal NO _x 20 lb/10 ³ gal Lead 0.0013 lb/10 ³ gal Total HAP 0.0466 lb/10 ³ gal			
03	AP-42 1.4 Nat. Gas	PM 7.6 lb/MMscf PM ₁₀ 7.6 lb/MMscf SO ₂ 0.6 lb/MMscf VOC 5.5 lb/MMscf CO 84 lb/MMscf NO _x 50 lb/MMscf Lead 0.0005 lb/MMscf Total HAP 1.89 lb/MMscf			
04	AP-42 3.4	PM 0.0697 lb/MMBtu PM ₁₀ 0.0573 lb/MMBtu SO ₂ 0.505 lb/MMBtu VOC 0.09 lb/MMBtu CO 0.85 lb/MMBtu NO _x 3.2 lb/MMBtu Total HAP 0.00157 lb/MMBtu			
06	AP-42 3.2	PM 0.000991 lb/MMBtu PM ₁₀ 0.0095 lb/MMBtu SO ₂ 0.000588 lb/MMBtu VOC 0.0296 lb/MMBtu CO 3.72 lb/MMBtu NO _x 2.21 lb/MMBtu Total HAP 0.1266 lb/MMBtu			
07	TANKS program				
09	AP-42 1.4 Nat. Gas	PM 7.6 lb/MMscf PM ₁₀ 7.6 lb/MMscf SO ₂ 0.6 lb/MMscf VOC 5.5 lb/MMscf CO 84 lb/MMscf NO _x 50 lb/MMscf Lead 0.0005 lb/MMscf Total HAP 1.89 lb/MMscf			

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
None				

14. 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)
None				

15. 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, 03, 09	Natural Gas Usage	455,144,000 scf	Monthly	N
01	Fuel oil usage	1,047,434 gallons per year	Monthly	N
02	Fuel oil usage	1,047,434 gallons per year	Monthly	N
04	Fuel oil usage	32,490 gallons per year	Monthly	N
01, 02, 04	Fuel Oil Sulfur Content	0.5%	Monthly	N
04 & 06	Hours of Usage	100 hours/year maximum per unit for maintenance checks/readiness testing; 50 hrs/year/unit for non-emergency, but these hours	Monthly	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
		counted in 100 hrs maximum above		
07	Gallons of gasoline throughput	10,000 gallons/rolling 12 month period	Monthly	N

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
Facility	5%	§19.503	Inspector Observation

17. DELETED CONDITIONS:

Former SC	Justification for removal
#14, #15, #20	Conditions specific to SN-05 emergency generator that was removed from facility

18. GROUP A INSIGNIFICANT ACTIVITIES:

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Natural Gas Fired Fryer	A-1	0.1	0.1	0.1	0.9	2.75		
10,000 Gallon Storage Tank Containing #2 Fuel Oil	A-3							
1,500 Gallon Storage Tank Containing Used Oil	A-3							

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19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

List all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
1709-AR-4

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 03-11-16

Facility Name: Boar's Head Provisions
Co., Inc.
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			Old Permit	New Permit
\$/ton factor	23.93	Permit Predominant Air Contaminant	99.4	76.1
Minimum Fee \$	400	Net Predominant Air Contaminant Increase	-23.3	
Minimum Initial Fee \$	500			
Check if Administrative Amendment	<input type="checkbox"/>	Permit Fee \$	400	
		Annual Chargeable Emissions (tpy)	76.1	

Pollutant (tpy)	Old Permit	New Permit	Change
PM	5	4.9	-0.1
PM ₁₀	5	3.9	-1.1
PM _{2.5}	0	0	0
SO ₂	99.4	76.1	-23.3
VOC	3	3	0
CO	19.8	34.8	15
NO _x	72.2	52	-20.2
Lead	0	0.04	0.04
Total HAP	0.000837	0.72	0.719163