# ADEQ MINOR SOURCE AIR PERMIT

Permit #: 1986-AR-3

IS ISSUED TO:

Tyson Foods, Inc./Cobb Vantress – Siloam Springs Feed Mill 2125 Country Club Road Siloam Springs, AR 72761 Benton County AFIN: 04-00540

THIS PERMIT IS TYSON FOODS, INC.'S AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND THE APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 ET SEQ.) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Keith A. Michaels

Date

Section I:	FACILITY INFORMATION
PERMITTEE:	Tyson Foods, Inc. / Cobb Vantress – Siloam Springs Feed Mill
AFIN:	04-00540
PERMIT NUMBER:	1986-AR-3
FACILITY ADDRESS:	2125 Country Club Road Siloam Springs, AR 72761
COUNTY:	Benton
CONTACT POSITION:	Mill Manager – Brad Harlow
TELEPHONE NUMBER:	(479)549-3985
FAX NUMBER:	(479)549-3989
REVIEWING ENGINEER:	Paul Osmon
UTM North-South (Y)	Zone 15 4007.1 km N
UTM East-West (X):	Zone 15 363.7 km E



#### Section II: INTRODUCTION

Tyson Foods, Inc. owns a feed mill located at 2125 North Country Club Road in Siloam Springs and it will be operated by its wholly owned subsidiary – Cobb Vantress. This permit modification raises the throughput limit through the facility to 200,000 tons per year and raises the emission limits accordingly. Emission limits for all sources were re-calculated using the latest AP-42 factors.

#### **Process Description**

Grains, meals, and other minerals are received from rail cars and trucks in a partially enclosed shed. Whole corn is gravity choke fed in the below grade hopper. Displaced air is controlled by a baghouse (SN-01). The whole grain is directed through an elevator leg into one of four whole corn storage bins. Meals and minerals (soft stock) are directed from the elevator onto a conveyor to applicable storage bins. Entrained dust in this conveyor is captured by a baghouse (SN-03). Displaced air from the pneumatic transfer of salt is controlled by a baghouse (SN-02).

Whole corn from the storage bins is transferred to one hammermill grinder. In order to improve efficiency of the grinding process and to greatly reduce emissions from the process, an "air assist" baghouse (SN-04) captures all exhausted air from the grinder. The ground corn is elevated and conveyed to the batching and mixing storage bins. The ground grain, liquid ingredients, and other stored ingredients are routed to scales. When the scales contain the proper formulation, the material is transferred to the mixer, mixed and then conveyed in the pellet mash storage bins. Pellet mash can be shipped out as a feed at this point. However, the majority of the mash is sent to the pellet mill where it is pelletized (compressed into pellets) and routed through a pellet cooler. Air emissions from the cooler are directed through a dual high efficiency cyclone collector (SN-05) and vented. Steam for the pelletizing operation is provided by one 250 HP natural gas fired boiler (SN-07). There is no backup fuel provided for this boiler. The pellets are coated with fat and conveyed to finished storage bins. Bulk loadout takes place under a partially enclosed shed and the emissions generated during bulk loadout are designated as SN-06.

#### Regulations

This facility is subject to the Arkansas Air Pollution Control Code dated February 15, 1999 (Regulation 18) and Regulations of the Arkansas Plan of Implementation for Air Pollution Control dated February 15, 1999 (Regulation 19). The boiler (SN-07) is subject to NSPS 40 CFR 60 Subpart Dc - Standards of Performance for Small Industrial Commercial-Institutional Steam Generating Units since it was manufactured after June 9, 1989 and has a heat design input capacity greater than 10 million Btu/hr.

Total Allowable Emissions			
Pollutant	<b>Emissions Rates</b>		
ronutant	lb/hr	tpy	
PM	7.2	17.6	
PM <sub>10</sub>	4.1	10.0	
$SO_2$	0.1	0.1	
VOC	1.8	4.4	
СО	0.9	3.7	
NO <sub>x</sub>	1.0	4.7	
Total HAP (Formaldehyde)	1.7	4.1	

The following table is a summary of the facility's total emissions.

**Table 1 - Total Allowable Emissions** 

#### Section III: PERMIT HISTORY

Permit No. 1986-A was issued on August 23, 2001 to Tyson Foods, Inc. for the initial construction of this facility. Permit emission limits were: PM - 7.0 tpy,  $PM_{10}$  - 4.0 tpy, SO<sub>2</sub> - 0.1 tpy, VOC- 0.3 tpy, CO - 4.0 tpy, and NO<sub>x</sub> - 4.7 tpy.

Permit No. 1986-AR-1 was issued on May 20, 2002 to Tyson Foods, Inc. to correct the permit for minor changes in equipment that was purchased for the mill installation after the initial permit was issued. Permit emission limits were: PM - 7.1 tpy,  $PM_{10}$  - 4.1 tpy,  $SO_2$  - 0.1 tpy, VOC- 0.3 tpy, CO - 4.0 tpy, and  $NO_x$  - 4.7 tpy.

Permit No. 1986-AR-2 was issued on February 12, 2003 to Tyson Foods, Inc. to modify the permit to show that formaldehyde was added as an additive to the animal food produced and to define emission limits for formaldehyde. Permit emission limits were: Formaldehyde – 1.6 tpy, PM - 7.1 tpy,  $PM_{10}$  - 4.1 tpy, SO<sub>2</sub> - 0.1 tpy, VOC- 0.3 tpy, CO - 4.0 tpy, and NO<sub>x</sub> - 4.7 tpy.

#### Section IV: EMISSION UNIT INFORMATION

#### **Specific Conditions**

1. The permittee will not exceed the emission rates set forth in the following table. [§19.501 et seq. of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control] and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	Тру
01	Truck/Rail Receiving Baghouse	PM <sub>10</sub>	0.1	0.1
02	Salt Receiving Baghouse	PM <sub>10</sub>	0.1	0.5
03	Receiving Conveyor Crossover Baghouse	PM <sub>10</sub>	0.2	0.2
04	Hammer Mill Baghouse	PM <sub>10</sub>	0.4	1.2
05	Pelleting System Cyclone	PM <sub>10</sub>	3.0	7.5
		VOC	1.6	4.0
06	Feed Shipping Non-point Source	PM <sub>10</sub>	0.2	0.1
		VOC	0.1	0.1
07	Boiler	PM <sub>10</sub>	0.1	0.4
	250 HP	$SO_2$	0.1	0.1
	(Natural Gas Fired)	VOC	0.1	0.3
		СО	0.9	3.7
		NO <sub>x</sub>	1.0	4.7

2. The permittee will not exceed the emission rates set forth in the following table. [§18.801 of the Arkansas Air Pollution Control Code, effective February 15, 1999 (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 3	- Non-Criteria	<b>Pollutants</b>
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SN	Description	Pollutant	lb/hr	tpy
01	Truck/Rail Receiving Baghouse	РМ	0.2	0.2
02	Salt Receiving Baghouse	PM	0.1	0.5
03	Receiving Conveyor Crossover Baghouse	РМ	0.2	0.2
04	Hammer Mill Baghouse	РМ	0.4	1.2

05	Pelleting System Cyclone	PM	6.0	15.0
		Formaldehyde	1.6	4.0
06	Feed Shipping Non-point Source	PM	0.2	0.1
		Formaldehyde	0.1	0.1
07	Boiler	РМ	0.1	0.4
	250 HP			
	(Natural Gas Fired)			

3. Visible emissions will not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
SN-01	10%	§18.501
SN-02		
SN-03		
SN-04		
SN-05	20%	§18.501
SN-06		
SN-07	5%	§18.501

**Table 4 - Visible Emissions** 

- 4. The permittee will not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303. [§18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-31]
- 5. The permittee will not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. [§18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

## **Facilitywide Conditions**

- 6. The permittee will not process more than 200,000 tons of grain at the facility per consecutive 12-month period. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- The permittee shall not use more than 138,100 gallons per year of 30% aqueous formaldehyde solution in the feed produced per consecutive 12 month period. [§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

- 8. The permittee will maintain monthly records which demonstrate compliance with Specific Condition #No. 6 and 7. The permittee will update the records by the fifteenth day of the month following the month to which the records pertain. The permittee will keep the records onsite, and make the records available to Department personnel upon request. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 9. The permittee shall use only pipeline quality natural gas or LP gas for fuel in the boiler (SN-07). The permittee shall keep records of the fuel usage at this facility. Records shall be retained for two years. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

#### **NSPS Requirements**

10. SN-07 is subject to 40 CFR 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The permittee shall comply with all applicable regulations under 40 CFR 60, Subpart Dc. Requirements of this subpart for this facility include, but are not limited to the following: 40 CFR 60.48c(g): records of the amount of fuel combusted for SN-07, and 40 CFR 60.48c(i): maintaining those records for two years. ADEQ has received permission from the EPA to extent the fuel record keeping interval on small natural gas fuel boilers. The permittee is required to keep monthly records of the fuel combusted each month by SN-07 and to maintain those records for at least two years. Based on the EPA alternative recordkeeping policy for Subpart Dc boilers, records of overall facility gas usage will be sufficient fuel records since there is no other equipment with a heat usage of greater than a 1 MMBtu/hr at the facility. [§19.304 of Regulation 19 and 40 CFR, Part 60, Subpart Dc]

#### Section V: INSIGNIFICANT ACTIVITIES

The Department deems the following types of activities or emissions as insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and 19 Appendix A. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated February, 2000. There are no insignificant activities listed.

### Section VI: GENERAL CONDITIONS

- Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*). Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
- 2. This permit does not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated under the Act. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 3. The permittee will notify the Department in writing within thirty (30) days after commencement of construction, completion of construction, first operation of equipment and/or facility, and first attainment of the equipment and/or facility target production rate. [§19.704 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation 19) and/or A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- Construction or modification must commence within eighteen (18) months from the date of permit issuance. [§19.410(B) of Regulation 19 and/or §18.309(B) of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 5. The permittee must keep records for five years to enable the Department to determine compliance with the terms of this permit--such as hours of operation, throughput, upset conditions, and continuous monitoring data. The Department may use the records, at the discretion of the Department, to determine compliance with the conditions of the permit. [§19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- A responsible official must certify any reports required by any condition contained in this permit and submit any reports to the Department at the address below. [§19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

> Arkansas Department of Environmental QuaDiyision ATTN: Compliance Inspector Supervisor Post Office Box 8913 Little Rock, AR 72219

- 7. The permittee will test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) newly constructed or modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start-up of the permitted source or (2) existing equipment already operating according to the time frames set forth by the Department. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee must submit compliance test results to the Department within thirty (30) days after the completion of testing. [§19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 8. The permittee will provide: [19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. Sampling ports adequate for applicable test methods
  - b. Safe sampling platforms
  - c. Safe access to sampling platforms
  - d. Utilities for sampling and testing equipment
- 9. The permittee will operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee will maintain in good condition at all times equipment, control apparatus and emission monitoring equipment. [§19.303 of Regulation 19 and/or §18.1104 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 10. Pursuant to, if the permittee exceeds an emission limit established by this permit, the permittee will be deemed in violation of said permit and will be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met: [§19.601 of Regulation 19 and/or §18.1101 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and the permittee took all reasonable measures to immediately minimize or eliminate the excess emissions.
  - b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.
  - c. The permittee must submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions

to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, it need not be submitted again.

- 11. The permittee shall allow representatives of the Department upon the presentation of credentials: [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit
  - b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act
  - c. To inspect any monitoring equipment or monitoring method required in this permit
  - d. To sample any emission of pollutants
  - e. To perform an operation and maintenance inspection of the permitted source
- The Department issued this permit in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 13. The Department may revoke or modify this permit when, in the judgment of the Department, such revocation or modification is necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated the Arkansas Water and Air Pollution Control Act. [§19.410(A) of Regulation 19 and/or §18.309(A) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 14. This permit may be transferred. An applicant for a transfer must submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated §8-1-106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of the receipt of the disclosure statement. The Department may deny a transfer on the basis of the information revealed in the disclosure statement or other investigation or, deliberate falsification or omission of relevant information. [§19.407(B) of Regulation 19 and/or §18.307(B) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 15. Pursuant to, this permit shall be available for inspection on the premises where the control apparatus is located. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 16. This permit authorizes only those pollutant emitting activities addressed herein. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 17. This permit supersedes and voids all previously issued air permits for this facility. [Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

# ATTACHMENT A