

# ADEQ

ARKANSAS  
Department of Environmental Quality

September 19, 2007

Mr. Bentley Hollingsworth  
Pilgrim's Pride Corporation  
d/b/a Premium Protein Products  
3433 Bernice Avenue  
Russellville, Arkansas 72801

Re: Notice of Administrative Amendment  
AFIN: 58-00003, Permit No.: 0548-AR-2

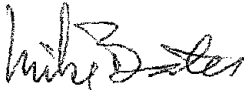
Dear Mr. Hollingsworth:

Enclosed are the following amendments to Permit No. 0548-AR-2 completed in accordance with the provisions of Section 19.407 of Regulation No. 19, *Regulations of the Arkansas Plan of Implementation for Air Pollution Control*.

Based on the information submitted by the facility as an Administrative Amendment, the request to install a 20000 gallon diesel fuel storage tank in the plant has been approved. The new diesel fuel storage tank has been included in the insignificant activities list of the reference permit.

Please place the revised permit in your files.

Sincerely,



Mike Bates  
Chief  
Air Division

PMM



# ADEQ MINOR SOURCE AIR PERMIT

Permit #: 0548-AR-2

IS ISSUED TO:

Pilgrim's Pride Corporation  
d/b/a Premium Protein Products  
3433 Bernice Avenue  
Russellville, Arkansas 72801  
Pope County  
AFIN: 58-00003

THIS PERMIT IS Pilgrim's Pride Corporation d/b/a Premium Protein Products'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:



Mike Bates  
Chief, Air Division

September 19, 2007  
Date Amended

## ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY

### SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

Submitted By: Pilgrim's Pride Corporation  
d/b/a Premium Protein Products  
3433 Bernice Avenue  
Russellville, Arkansas 72801  
Contact Person: Gary Reddell  
Title: Plant Superintendent  
Telephone # (501) 968-2567

**AFIN:** 58-00003

**Permit No.:** 548-AR-2

**Date Issued:** August 11, 1995

Submittals: December 19, 1994; January 9, 1995; April 12, 1995; May 3, 1995, and August 16, 2007.

### SUMMARY

Pilgrim's Pride Corporation owns and operates a rendering plant (SIC Code 2077) in Russellville, Arkansas. This is the second revision to its original permit 548-A. The facility is replacing its existing equipment with new equipment to improve the plant wide efficiency. The Russellville rendering plant recycles poultry (offal and feathers) and red meat (offal) industry waste products into grease, meat meal, and feather meal. The products from this plant are used by animal and poultry feed industries.

### OFFAL RENDERING PROCESS

Poultry and beef offal is indirectly steam heated in two (2) continuous cookers (Stord Rotadisc TST 100 and Dupps 1500 Equacooker) to drive off the bound and free moisture. The water vapor generated is condensed in three (3) air cooled condensers (ACC) with the non condensable gases ducted to a venturi scrubber prior to incineration. The ACC condensate is discharged to the on-site wastewater treatment system prior to discharge to the City of Russellville sanitary sewer.

The cooked material passes over a screen (drainor), where the solids are pressed (pressor), ground, and screened to produce meat meal. Whereas the screened liquid is centrifuged to produce grease, the meat meal is stored in a silo. The inedible grease is stored in five (5) storage tanks (located outside).

Vapors/gases off of the drainor, pressors, and centrifuge are ducted to the venturi scrubber prior to incineration. The incinerator uses natural gas to "oxidize" the high intensity odorous gases. The heat energy from the incinerator exhaust is recovered by a recovery boiler, which generates steam for the rendering process.

### FEATHER RENDERING PROCESS

Feathers are hydrolyzed in batch cookers (7) and dried in a continuous dryer (Stord Rotadisc TST 100). The feather meal leaving the dryer is screened prior to storage in a silo. The pneumatically conveyed feather meal is discharged from a cyclone to the trucks. The transport air is ducted from the cyclone back into the silo.

Pilgrim's Pride Corporation - d/b/a Premium Protein Products  
Permit # 548-AR-2  
AFIN: 58-00003

The moisture or water vapor coming off of the hydrolyzes and the dryer is scrubbed in a wet cyclone and condensed in two (2) air cooled condensers (ACC). The non-condensable gases are ducted to the incinerator. The ACC condensate is treated in the on-site wastewater treatment system prior to discharge to the City of Russellville sanitary sewer.

The entire plant is maintained under a negative pressure by two (2) 75,000 CFM packed tower scrubbers. This permits all room air to be treated, with an oxidizing solution (sodium hypochlorite), prior to discharge to the atmosphere.

Besides the steam produced by the incinerator exhaust driven waste heat boiler, process steam is supplied by five (5) natural fired boilers (SN-01 through SN-05).

This facility is regulated under the Air Code and Arkansas Plan of Implementation for Air Pollution Control (SIP). A complete list of emission limits can be found in Table-I of this permit.

Pilgrim's Pride Corporation - d/b/a Premium Protein Products  
Permit No. 548-AR-2  
AFIN: 58-00003

### Specific Conditions

1. Emissions shall not exceed the emission limits set forth in Table-I. Emissions from any point source not specifically listed in Table-I of this permit shall be considered a violation of this permit.
2. Visible emissions, as measured by EPA Method 9, shall not exceed the opacity values specified in - I.
3. The permittee shall not conduct operations in a manner that would cause visible emissions to extend beyond the property boundary.
4. The permittee shall use only natural gas as a fuel for SN-01 through SN-06. Natural gas consumption shall not exceed 106.2 million standard cubic feet per month, and 1274 million standard cubic feet per year. The permittee shall maintain a record of natural gas consumption per month, subject to all the conditions specified in Table-I. This record shall be updated each month and shall be made available to Department personnel upon request. This record shall be used to determine compliance with the limits set forth in Table-I.
5. The rendering materials processed at the facility shall not exceed 10 million pounds per week, and 520 million pounds per year. The permittee shall maintain a monthly record of the rendering materials processed at the facility. This record shall be updated each month and shall be made available to Department personnel upon request.
6. The incinerator shall be operated at all times whenever any odor generating process is being conducted at the plant, and shall be operated in accordance with the operation instructions. The operation instructions shall be posted near the incinerator. The permittee shall not burn any solid material in the incinerator.
7. The incinerator shall be kept in good operating condition and the temperature shall be maintained at design specifications at all times. The temperature at the exit of the afterburner chamber shall be maintained at a minimum of 1400 degrees Fahrenheit.
8. The permittee shall maintain an average pH of 7.0 and an ORP reading of 100 mV in the scrubber recirculating solution at all times.
9. The permittee shall not use in excess of 37,500 gallons of 10% Sodium Hypochlorite solution per year. The chlorine emissions from this facility shall not exceed 7.5 tons per year. The permittee shall maintain a record of Sodium Hypochlorite solution purchased at the facility. This record shall be updated each month and shall be made available to Department personnel upon request

Pilgrim's Pride Corporation - d/b/a Premium Protein Products  
Permit No. 548-AR-2  
AFIN: 58-00003

10. All areas of the rendering building where odors can produced shall be under negative pressure during all rendering operations including the receiving and storage of raw materials, cooker operations, and during any rendering equipment maintenance period which might result in odorous emissions. All plant air discharge during the above conditions shall be treated by plant air scrubbers or incinerator before being exhausted into the atmosphere.
11. The premises of the facility shall be kept clean and free from collection of raw and finished products, refuse, waste materials, and standing pools of water to prevent the occurrence of a nuisance condition. Plant roads, truck loading and unloading areas, and parking areas shall be paved and cleaned as necessary to prevent the occurrence of nuisance conditions. Vessels used for transportation of raw materials shall be washed and kept free of odors while stored on the property.
12. The pollution control devices (cyclones and scrubbers) associated with this facility shall be maintained and operated in serviceable condition, as prescribed by the manufacturer, during operation of this facility.
13. This permit shall void and supersede permit 548-AR-1.
14. Any modifications, construction, or reconstruction shall reported to the Department in advance.
15. 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 8/16/2007.

Insignificant Activities

Description	Category
Diesel Fuel Storage Tanks (Vertical Fixed Roof Tank)	Group A Number 13

Pilgrim's Pride Corporation - d/b/a Premium Protein Products  
 Permit No. 548-AR-2  
 AFIN: 58-00003

**TABLE-I (Allowable Emission Rates)**

SN	Description	Control Equipment	Hours of Operation	Pollutant										Regulation	Opacity Limit
				PM/PM <sub>10</sub>		SO <sub>2</sub>		VOC		CO		NO <sub>x</sub>			
				lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy		
01	Boiler # 1 25.2 MM Btu/hr Natural Gas	None	24/7/52	0.4	1.8	0.1	0.5	0.1	0.5	0.9	4.0	3.6	15.8	SIP	15%
02	Boiler #2 25.2 MM Btu/hr Natural Gas	None	24/7/52	0.4	1.8	0.1	0.5	0.1	0.5	0.9	4.0	3.6	15.8	SIP	15%
03	Boiler #3 25.2 MMBtu/hr Natural Gas	None	24/7/52	0.4	1.8	0.1	0.5	0.1	0.5	0.9	4.0	3.6	15.8	SIP	15%
04	Boiler #4 25.2 MM Btu/hr Natural Gas	None	24/7/52	0.4	1.8	0.1	0.5	0.1	0.5	0.9	4.0	3.6	15.8	SIP	15%
05	Boiler #5 293 MM Btu/hr Natural Gas	None	24/7/52 2	0.4	1.8	0.1	0.5	0.1	0.5	1.0	4.4	4.1	18.0	SIP	15%
06	Odor Control Equipment	Incinerator	24/7/52	0.2	0.9	0.1	0.5	0.1	0.5	0.6	2.7	2.1	9.2	SIP	15%
07	Feathermeal Truck Loading	Cyclone	6/6/52	3.5	3.3	-	-	-	-	-	-	-	-	SIP	20%
08	Room Air Odor Control	Scrubber	24/7/52	0.1	n.5	-	-	-	-	-	-	-	-	Air Code/SIP	10%
09	Room Air Odor Control	Wet Cyclone	24/7/52	0.1	05	-	-	-	-	-	-	-	-	SIP	10%
10	Feathermeal Silo Loading	Cyclone	24/7/52	7.0	82	-	-	-	-	-	-	-	-	SIP	20%
Total Emissions				9.4	22.4	0.6	3.0	0.6	3.0	5.2	23.1	20.6	90.4	SIP	