

## AIR PERMIT REVIEW

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<b>APPLICANT:</b>	<b>SITE LOCATION:</b>	<b>COUNTY:</b>
Perdue Farms, Inc.	Cofield	Hertford

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<b>TECHNICAL CONTACT:</b>	<b>PHONE:</b>	<b>RESPONSIBLE OFFICIAL:</b>	<b>TITLE:</b>
Wayne Black	(252) 348-4326	Wayne Black	Env. Manager

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<b>REVIEW ENGINEER:</b>	<b>SIGNATURE:</b>	<b>DATE:</b>
William D. Willets, P.E.		December 17, 2003

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<b>REGIONAL CONTACT:</b>	<b>REGIONAL OFFICE:</b>	<b>SIC CODE:</b>
Bernie Pittman	Washington	2048, 2075, 5153

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<b>APPLICATION NUMBER:</b>	<b>EXISTING PERMIT NUMBER:</b>	<b>NEW PERMIT NUMBER:</b>
4600082.03A	02875T21	02875T22

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### 1. Purpose of Application

This permitting action is a renewal of an existing Title V permit pursuant to 2Q .0513. The existing Title V permit (02875T21) was issued on June 2, 2004 and was scheduled to expire on December 31, 2003. The permittee is currently operating under the application shield based on a complete renewal application received on January 21, 2003. Since the renewal application was received on January 21, 2003 or at least nine months prior to the expiration date, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

### 2. Facility Description

This is a feed mill (soybean and corn) and soybean oil extraction facility. Typical operations include grain and pellet storage tanks and silos, receiving and loadout operations, elevators, milling, dryers, and soybean processing including hexane extraction and recovery. This facility is a Title V facility because potential sulfur dioxide emissions from the facilities boilers are greater than 100 tons per year. Additionally, VOC emissions from various sources including the soybean oil extraction process are greater than 100 tons per year.

### 3. Application Chronology

January 21, 2003 - Title V renewal application received and assigned to Jeff Twisdale

February 2004 - Title V renewal application transferred to this engineer

February 12, 2004 - Received additional information re. MACT notification and CAM applicability

#### 4. Permit Modification/Changes

No new equipment was added or changed during this review. Since the initial Title V permit (02875T17) was issued the following changes have been permitted at the facility:

- Boiler ID No. ESB3 (natural gas, No. 4, No. 2, and No. 6 fuel oil-fired boiler, 16.7 million Btu per hour maximum heat input rate) was permitted to replace boiler ID No. ES1 (natural gas, No. 4 and No. 6 fuel oil-fired boiler, 12.5 million Btu per hour maximum heat input rate).
- Cyclone ID No. CD18 (60 inches in diameter) was permitted to replace cyclone ID No. CD18 (48 inches in diameter).

#### 5. Regulatory Review

The facility is subject to the following regulations:

2D .0503 "Particulates from Fuel Burning Indirect Heat Exchangers"

2D .0515 "Particulates from Miscellaneous Industrial Processes"

2D .0516 "Sulfur Dioxide Emissions from Combustion Sources"

2D .0521 "Control Of Visible Emissions"

2D .0524 "New Source Performance Standards"

2D .0958 "Work Practices for Sources of Volatile Organic Compounds"

2D .1111 "Maximum Achievable Control Technology"

2D .1806 "Control and Prohibition of Odorous Emissions"

2Q .0317 "Avoidance Conditions for 2D .0530 Prevention of Significant Deterioration"

The only new regulation applicable to this facility is 2D .1111 "Maximum Achievable Control Technology." These requirements are discussed below.

#### 6. NSPS, NESHAPS, PSD, Attainment Status, 112(r), CAM

##### NSPS

The new boiler (ID No. ESB3) is subject to NSPS Subpart Dc.

##### NESHAP/MACT

This facility is subject to 40 CFR 63, Subpart GGGG, Solvent Extraction for Vegetable Oil Production. The effective date of Subpart GGGG was April 12, 2001. Existing sources such as Purdue Cofield must be in compliance with the MACT requirements as of April 12, 2004.

The affected source must calculate monthly "compliance ratios" of actual HAP losses to allowable HAP losses. Allowable HAP losses depend on the type of oil seed being processed (based on the oilseed's solvent loss factor) and whether the source is new or existing. Actual HAP losses are calculated considering the "... weighted average volume fraction of HAP in solvent received during the previous 12 operating months ...."

The soybean extraction process has been shut down for several years and may or may not operate again. The MACT requirements are included in the permit contingent on recommencement of operation of this process. The June 4, 2004 inspection report indicates that WaRO agrees that the start-up, shutdown, and malfunction plan is not required until recommencement of operation.

**PSD**

This facility is PSD major with three PSD avoidance limits: two 250 tpy SO<sub>2</sub> limits and one 250 tpy VOC limit. Hertford County has been triggered for PSD increment tracking for PM<sub>10</sub>, SO<sub>2</sub>, and NO<sub>2</sub>, however, this renewal does not affect PSD increment tracking.

**Attainment Status**

This facility is located in Hertford County, which is in attainment according to 2D .0902.

**112(r)**

This facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule.

**CAM**

This facility is not subject to CAM. Before control potential emissions from controlled sources are less than the respective major source thresholds.

**7. Facility Wide Air Toxics**

The facility must perform a facility-wide air toxics demonstration required under 2Q .0705(b) prior to recommencing operation of the soybean extraction process and related operations. This process has been shut down for several years and may or may not operate again. A stipulation requiring the toxics demonstration is included in the permit.

**8. Facility Compliance Status**

The facility was inspected on April 30, 2004 (report dated June 4, 2004). The facility was considered to be in compliance with applicable air quality regulations. Further, it was noted that the facility has submitted emission inventories promptly and that there have been no public complaints about the facility.

**9. Facility Emissions Review**

There is no change in emissions for this renewal.

**10. Stipulation Review**

All stipulations are standard for this type of facility. General conditions were updated with the most recent version of the permit shell.

**11. Public Notice / EPA and Affected State Review**

Pursuant to 2Q .0521, a notice of the draft Title V Permit shall be placed in a newspaper of general circulation in the area where the facility is located. The notice will provide for a 30 day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 2Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 2Q .0522, a notice of the draft Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above. There are no affected States for this facility.

## **12. Conclusions, Comments, and Recommendations**

A professional engineer's seal was not required for this renewal.

A consistency determination was not required for this renewal.

WARO recommends issuance of the permit per Betsy Huddleston's e-mail received December 14, 2004.

RCO concurs with WARO's recommendation to issue air permit.