

217/782-2113

CONSTRUCTION PERMIT/PSD APPROVAL
NESHAP SOURCE

PERMITTEE

Archer Daniels Midland Company - Decatur Corn Germ Plant
Attn:
3883 Faries Parkway
Decatur, Illinois 62526

Application No.: 07090062 I.D. No.: 115015AAE
Applicant's Designation: CORN GERM PLANT Date Received: September 24, 2007
Subject: West Corn Germ Plant Modification
Date Issued:
Location: 3883 Faries Parkway, Decatur

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of modifications to the West Corn Germ Plant as described in the above referenced application. This Permit is subject to the following special condition(s) and standard conditions attached hereto, except as superseded by a special condition.

In conjunction with this permit, approval is given with respect to the Prevention of Significant Deterioration of Air Quality Regulations (PSD) for the above referenced project, in that the Illinois Environmental Protection Agency (Illinois EPA) finds that the application fulfills all applicable requirements of 40 CFR 52.21. This approval is issued pursuant to the Clean Air Act, as amended, 42 U.S.C. 7401 et. seq., the Federal regulations promulgated thereunder at 40 CFR 52.21 for Prevention of Significant Deterioration of Air Quality (PSD), and a Delegation of Authority agreement between the United States Environmental Protection Agency and the Illinois EPA for the administration of the PSD Program. This approval becomes effective in accordance with the provisions of 40 CFR 124.15 and may be appealed in accordance with the provisions of 40 CFR 124.19. This approval is based upon and subject to the following findings and the conditions. This approval is also subject to the general requirement that the project be developed and operated consistent with the specifications and data included in the application and any significant departure from the terms expressed in the application, if not otherwise authorized by this permit, must receive prior written authorization from the Illinois EPA.

If you have any questions on this permit, please call Kevin Smith at 217/782-2113.

Edwin C. Bakowski, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

ECB:KLS:psj

cc: Region 3 and USEPA Region V

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INTRODUCTION: FINDINGS

- 1a. Archer Daniels Midland (ADM) has requested a permit for a modification of its West Corn Germ Processing Plant at its Decatur manufacturing complex. The plant produces germ meal and unrefined vegetable oil from corn germ.
- b. The proposed modification will increase the capacity of the West Corn Germ Processing Plant by various measures including addition and replacement of several expellers, replacement of the existing extractor, replacement of an existing Desolventizer-Toaster-Dryer-Cooler (DTDC), and related changes of control systems, conveyor systems, and duct work.
- 2a.
 - i. The planned project will result in a significant increase in volatile organic materials (VOM) emissions as defined by the PSD rules. VOM emissions will be controlled by design and work practices to recover VOM solvent, by a leak detection and repair program, and by use of add on controls.
 - ii. the project would be accompanied by increased throughput by the existing facilities at the complex that handle corn germ, germ meal and corn oil. These increases can be accommodated by the existing facilities.
 - iii. The project will also be accompanied by increases in emissions from existing boilers, which would not be physically modified. In particular, the affected plant utilizes steam from existing coal-fired boilers, Boiler 1 through 9, in ADM's co-generation plant, which were constructed pursuant to Permits 85060030, 94020006 and 97050097. This permit does not authorize changes to the co-generation plant that would increase its capacity or allow emissions over the currently permitted levels, as set by Permits 85060030, 94020006 and 97050097.
- b. The source is located in Decatur Township in Macon County. The area is designated attainment for all criteria pollutants.
- c.
 - i. The project is subject to PSD review for emissions of VOM because the potential increase in VOM emissions from the project is significant, as described in Attachment 1.
 - ii. The project is not subject to PSD for other PSD pollutants because the increases in emissions are not significant.
3. This permit is issued based on the source being a major source for Hazardous Air Pollutants (HAP), so that emissions of HAP from the affected plant are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63, Subpart GGGG.
- 4a. After reviewing the materials submitted by ADM, the Illinois EPA has determined that the project, as proposed, would be designed so that the West Corn Germ Processing with planned modifications (i.e., the affected plant) would (i) comply with applicable state and federal

emission standards and (ii) utilize Best Available Control Technology (BACT) for emissions of VOM (Refer to the BACT determinations in Conditions 1.4 and 2.1.3-2.

- b. The air quality analysis prepared for the project shows that the project would not threaten compliance with air quality standards. In the case of ozone, the project would not contribute to an exceedance of the ozone air quality standard in Macon County, considering current air quality as monitored in the county.
5. The Illinois EPA has determined that the project, as proposed, would comply with all applicable Illinois Pollution Control Board Regulations and the federal PSD rules, 40 CFR 52.21.
6. A copy of the application and a summary of the Illinois EPA's review of the application and a draft of this permit were placed in a location in the vicinity of the project, and the public was given notice and an opportunity to examine this material and to submit comments and to request a public hearing on this matter.

Section 1: Conditions for the Project

1.1. Effect of Permit

- a. This permit does not relieve the Permittee of the responsibility to comply with all applicable local, state and federal requirements which are part of Illinois State implementation Plan, as well as all other applicable local, state and federal requirements.

1.2 Validity of Permit and Commencement of Construction

- a. This permit shall expire if construction of the modification of the corn germ plant is not commenced within 18 months of the effectiveness of the permit or is not pursued in a reasonable manner thereafter, as provided by 40 CFR 52.21(r)(2).

1.3 Permitted Emissions of the Affected Plant

- a. Annual VOM emissions from the affected plant, i.e., the modified West Corn Germ Processing Plant, shall not exceed 1,013.4 tons. This limit addresses all VOM emissions from the affected plant, including emissions during startup, shutdown and malfunction. This limit does not address emissions from existing facilities, e.g., the cogeneration plant, the East feedhouse, or the vegetable oil refinery, due to increased utilization of these existing facilities. Compliance with this limit and other annual limits in this permit shall be determined from a running total of 12 months of data.

Note: This permit is issued based upon an increase in VOM emissions of 112.9 tons/year from the affected plant. This increase in emissions is the difference between projected actual emissions and baseline actual emissions as provided in the application, which may exclude increased emissions that could have occurred without the project and are unrelated to this project, as provided for by 40 CFR 52.21(b)(4)(ii)(c).

1.4. BACT Determination - General Requirements

The Permittee shall operate and maintain the emission units at the affected plant, including associated air pollution control equipment, in a manner consistent with good air pollution control practice to minimize emissions, including the following practices:

- a. At all times, including periods of startup, shutdown, malfunction or breakdown, operate as practicable to minimize emissions.
- b. Air pollution control equipment shall be operated in accordance with written operating procedures that address startup and shutdown, as well as normal operation, which procedures shall be developed and maintained by the Permittee and may

incorporate the manufacturers recommended operating instructions.

- c. Conduct visual inspections of emission units and associated air pollution control as specified in Section 2.2.7.
- d. Conduct regular preventative maintenance on emission units and associated air pollution control devices as needed to assure reliable operation.
- e. Make prompt repairs to emission units and associated air pollution control devices upon identification of need either as a consequence of formal inspections or other observations.
- f. Install, operate and maintain required monitoring devices and instrumentation in accordance with good monitoring practices, following the manufacturer's recommended operating and maintenance procedures or such other procedures as are otherwise needed to assure reliable operation of such devices.
- g. Maintain records for the above inspection, maintenance, and repair activities.

1.5 Records for Required Operational Monitoring Systems and Instrumentation

- a. The Permittee shall keep records of the data measured by required monitoring systems and instrumentation. Unless otherwise provided in a particular condition of this permit, the following requirements shall apply to such recordkeeping:
 - i. For required operational monitoring systems, data shall be automatically recorded by a central data system, dedicated data logging system, chart recorder, other data recording device. If an electronic data logging system is used, the recorded data shall be the hourly average value of the particular parameter for each hour. During periods when the automatic recording device is out of service, data shall be recorded manually at least once every 12 hours for periods when the associated emission unit(s) is in service.
 - ii. For required instrumentation, the measured data shall be recorded manually at least once per shift, with data and time both recorded, for periods when the associated emission unit(s) are in service, provided however that if data from an instrument is recorded automatically, the above provisions for recording of data from monitoring systems shall apply.
- b. The Permittee shall maintain logs or other records for the operation and maintenance of operational monitoring systems and instrumentation required by this permit.

1.6. Retention and Availability of Records

- a. The Permittee shall retain all records required by this permit at the source for at least five years, at a location where the records are readily accessible for inspection by the Illinois EPA.
- b. The Permittee shall make all records required by this permit available for inspection at the source by the Illinois EPA, providing copies of records to the Illinois EPA upon request. For this purpose, the Permittee may keep records in a computerized data system provided that, upon request by the Illinois EPA during the sources normal working hours, requested information is retrieved and available prior to inspection completion to the Illinois EPA.

1.7 Notifications

- a. The Permittee shall notify the Illinois EPA within 30 days of the following events related to the affected plant:
 - i. Commencement of construction.
 - ii. Initial startup of each new or modified unit.
- b. The Permittee shall notify the Illinois EPA within 30 days of any deviation from the annual emission limitations for the plant, as set in Condition 1.3. Any such notification shall include the information specified in Condition 3.4.
- c.
 - i. Two copies of the above notification and other reports and notifications required by this permit shall be sent to the Illinois EPA, Division of Air Pollution Control, Compliance Section, in Springfield, unless otherwise indicated.
 - ii. One copy of the above notification and other required reports and notifications required by this permit shall be sent to the Illinois EPA's Regional Office of the Division of Air Pollution Control, unless otherwise indicated.

1.8 Authorization to Operate Emission Units

- a. The affected plant may be operated under this construction permit until final action is taken to incorporate these emission units in a revision to or renewal of its CAAPP Permit. The Permittee shall demonstrate initial compliance with the short-term emission limitations and emission testing in accordance with the Condition 3.1 of this permit.
- b. The Illinois EPA may extend this period upon request of the Permittee if additional time is needed to complete shakedown or perform emission testing.

SECTION 2: UNIT SPECIFIC CONDITIONS

2.1 Oil Extraction (Emissions of VOM)

2.1.1 Description

In the corn germ processing plant, germ is received and conditioned in a preparation area prior to the solvent extraction process. Initially, oil is removed from the germ using expellers that mechanically press the germ. These initial processing steps do not emit VOM. Emissions of particulate matter (PM) from these steps and other process steps in the affected plant are addressed in Condition 2.2.

After further conditioning, the remaining oil is extracted from the germ using hexane (a VOM) as the extracting solvent in a counter-flow extractor system. This oil is then separated from the hexane. Residual hexane is also removed from the de-oiled germ meal, and the meal is further processed prior to shipment. Hexane recovered from these operations is reused in the extractor system.

Emissions of VOM from these operations, which are present from hexane losses, will be controlled by a hexane recovery system, a multi stage control system, and other practices to minimize loss of hexane. Modifications to the affected plant include modifications to the expeller system, replacing the existing extractor with a new extractor, and replacing one of the existing Desolventizer Toaster Dryer Coolers (DTDC) (i.e., the "West DTDC" designated EU GE-05) (The other DTDC, the "South DTDC" will continue in use unchanged).

2.1.2 List of Emission Units and Pollution Control Equipment

| Process | Description | Emission Control Equipment |
|--------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Hexane Extraction | Hexane Extraction and Recovery from Germ Flakes | Condensers and Mineral Oil Absorption System |
| DTDC: Desolventizing/ Toasting Decks (West DTDC) | Hexane Removal from Spent Meal Flakes/Meal Flake Toasting | Evaporators, Condensers and Mineral Oil Absorption System |

2.1.3-1 Applicability Provisions

- a. An "affected unit" for the purpose of these unit specific conditions is an emission unit described in Conditions 2.1.1 and 2.1.2.
- b. The affected plant is subject to 40 CFR 63 Subpart GGGG, National Emission Standards for Hazardous Air Pollutants (NESHAP): Solvent Extraction for Vegetable Oil

Production. The affected process and the Permittee shall comply with all applicable provisions of the NESHAP.

- c. Except for modified affected emission units, this permit does not revise limits for existing units in the affected plant.

2.1.3-2 BACT Determination

- a. The VOM emissions for the affected plant shall not exceed 0.30 gallons of hexane per ton of oilseed processed, with compliance determined in accordance with the procedures of the NESHAP, 40 CFR 63 Subpart GGGG.

2.1.3-3 Applicable State Emissions Standards

- a. The affected plant is subject to 35 IAC Subpart N, Vegetable Oil Processing. The affected plant and Permittee shall comply with all applicable requirements of this subpart.

2.1.4 Operational and Production Limits and Work Practices

- a. The amount of corn germ handled at the affected plant shall not exceed 120,000 tons/month and 1,200,000 tons/year.

2.1.5 Emission Limitations

The emissions of VOM from the affected plant shall not exceed 1,013 tons/year. Compliance with this limit shall be based on a running total of 12 months of data, using the methodology of the NESHAP.

2.1.6 Testing Requirements

None

2.1.7 Monitoring and Instrumentation Requirements

- a. For the mineral oil scrubber, the Permittee shall install, maintain and operate instrumentation for the following operating parameter:
 - i. Percent LEL exiting the final vent exiting the mineral oil scrubber system.
 - ii. Flow rate of mineral oil or exhaust gas temperature.

2.1.8 Recordkeeping Requirements

- a. The Permittee shall maintain the following logs or other records for each affected unit or group of related units at the affected plant:

- i. An operating log, in accordance with Condition 3.3(a).
 - ii. An inspection, maintenance and repair log, in accordance with Condition 3.3(b).
- b. The Permittee shall fulfill applicable recordkeeping requirements of the NESHAP.
- c. The Permittee shall fulfill applicable recordkeeping requirements of 35 IAC Subpart N.
- d. The Permittee shall maintain records for the VOM emissions of the affected plant (tons/month and tons/year) with supporting calculations.

2.1.9 Reporting Requirements

- a. The Permittee shall fulfill applicable notification and reporting requirements of the NESHAP.
- b. The Permittee shall notify the Illinois EPA of any deviations from the requirements of this permit for the affected units with the reports required by the NESHAP. These notifications shall include the information specified by and be submitted in accordance with Condition 3.4.

2.2 Particulate Matter (PM) Process Emission Units

2.2.1 Description

At the affected plant, corn germ received by truck or rail is cleaned and conditioned/heated before being pressed in the expellers to remove oil prior to hexane extraction. Spent flakes (germ meal) from extraction are desolventized, dried and cooled. These operations are a source of particulate matter emissions. Modifications to the affected plant include increasing the capacity of the existing expeller system by adding or replacing up to six expellers, replacement of the extractor, and replacing the "West DTDC" (EU GE-05), one of the two existing DTDCs with a larger unit.

Emissions of particulate matter from Expeller cages #1 through #11 are controlled by the rotoclone (CE GP-02), Expeller vents #1 through #11 are controlled by the 3rd Floor Cyclone (CE GP-03) and Expeller #12 and #13 cages and vents are controlled by the expander aspiration cyclone (CE GP-04). Emissions of particulate matter from the dryer/cooler decks of the new DTDC (EU GE-05), which vent to the atmosphere rather than to the hexane recovery system, will be controlled using a cyclone in series with a baghouse. Emissions of particulate matter from the first dryer deck of the new DTDC will be controlled using one cyclone and baghouse and emissions from the cooler section of the new DTDC and a possible second dryer deck will be controlled using a second cyclone and baghouse. The new and modified emission units at the affected plant are listed in 2.2.2.

2.2.2 List of New and Modified Emission Units and Control Equipment

| Process | Description | Emission Control Equipment |
|-----------------------------------------------------------|--------------------------------------------------|------------------------------------------------------|
| Expellers (EU GP-02) | Mechanical Pressing to Remove Oil from Corn Germ | Rotoclone (CE GP-02) and Cyclones (CE GP-02 & GP-04) |
| New DTDC (EU GP-05): Dryer/Cooler Decks (West DTDC) | Dry and Cool Germ Meal | Cyclones/ Baghouses |

2.2.3-1 Applicability Provision

- a. An "affected unit" for the purpose of these unit specific conditions is an emission unit described in Conditions 2.2.1 and 2.2.2.
- b. Except for affected units, this permit does not revise operating or emission limits or other applicable requirements for existing emission units at the affected plant.

2.2.3-2 Applicable Emission Standards Regulations

- a. The affected units are subject to the general state emission standards for opacity (35 IAC 212.123) and PM (35 IAC 212.321).

2.2.4 Operational and Production Limits and Work Practices

- a. The Permittee shall operate the rotoclone (CE GP-02) and cyclones (CE GP-03 and GP-04) in a manner consistent with the manner of operation during the most recent emission testing showing compliance.
- b. The Permittee shall operate each baghouse for affected DTDC with a pressure drop that is within a range that is consistent with the range of operation during the most recent emission test showing compliance.

2.2.5 Emission Limitations

- a. Emissions of PM from the new and modified affected units shall not exceed the following limits:

| Unit(s) | Limit | |
|---------------------------------------|----------|-----------|
| | Lbs/Hour | Tons/Year |
| Expellers (Rotoclone Vent - EP GP-02) | 1.73 | 7.58 |
| "West DTDC" (EU GE-05) | 1.28 | 5.61 |
| Total | ---- | 13.2 |

2.2.6 Testing Requirements

- a.
 - i. Within 180 days of initial startup of the modified plant, the Permittee shall have emission testing conducted in accordance with Condition 3.1 for the PM emissions of the affected units.
 - ii. Upon request by the Illinois EPA the Permittee shall promptly have emissions testing conducted in accordance with Condition 3.1 for the PM emissions of the affected units or existing units in the affected plant, as specified by the request.
- b. Upon request by the Illinois EPA, the Permittee shall promptly perform opacity observation for an affected unit in accordance with the methods and procedures specified by Condition 3.2.

2.2.7 Operational Instrumentation Requirements

- a. The Permittee shall install and operate a water flow indicator on the rotoclone (CE GP-02) and record the indicator reading at least once per operating day.

- b. The Permittee shall install, operate and maintain instrumentation on each baghouse for the DTDC to measure the pressure drop across the device and record pressure drop at least once per operating day.

2.2.8 Recordkeeping Requirements

- a. The Permittee shall maintain a file containing the following information for the control devices for the affected units:
 - i. For each device, a copy of the manufacturer's specifications for the exhaust dust loading and the manufacturer's recommended operating and maintenance procedures for the device.
 - ii. The normal range of pressure drop within which each baghouse(s) is operated, as required by Condition 2.2.4(b), with explanation and supporting documentation.
 - iii. The range of operating parameters within which the rotoclone is operated, as required by Condition 2.2.4(a), explanation and supporting documentation.
- b. The Permittee shall maintain the following log(s) or other records for the affected units:
 - i. Operating log(s) in accordance with Condition 3.3(a).
 - ii. Inspection, maintenance and repair log(s) in accordance with Condition 3.3(b).
- c. The Permittee shall maintain the following records related to the emissions of each affected units:
 - i. Documentation for the PM emission factor(s) and maximum hourly emission rates used by the Permittee to determine emissions of the unit.
 - ii. Records for any hour in which emissions exceeded an applicable limit.
 - iii. The PM emissions of the unit (tons/month and tons/year) based on appropriate emission factors and operating data, with supporting calculations.

2.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA of any deviations from the requirements of this permit for the affected units as follows. These notifications shall include the information specified by and be submitted in accordance with Condition 3.4.

- a. Excess opacity from the affected units that lasts more than 24 minutes (four 6-minute averaging periods) shall be immediately reported to the Illinois EPA.
- b. The deviations addressed above and all other deviations shall be reported in accordance with Condition 3.4 and included in the semi-annual monitoring and annual compliance reports required by the Facilities CAAPP permit.

SECTION 3: GENERAL REQUIREMENTS

3.1. Emission Testing Requirements

- a. i. The following testing methods and procedures shall be used. Refer to 40 CFR 60, Appendix A for USEPA test methods.

| | |
|---------------------------|-------------------------------------|
| Location of Sample Points | USEPA Method 1 |
| Gas Flow and Velocity | USEPA Method 2 |
| Flue Gas Weight | USEPA Method 3 |
| Moisture | USEPA Method 4 |
| Particulate Matter (PM) | USEPA Method 5 and 202 ^A |
| Opacity | USEPA Method 9 ^B |

Notes:

- A. Particulate matter tests shall include measurements of condensable particulate matter, as collected in the back half of the Method 5 sampling train or by separate measurements using USEPA Method 202 (40 CFR Part 51, Appendix M).
- B. Observation of opacity shall be made in conjunction with measurements of PM emissions.

- b. The Permittee shall submit a written test plan to the Illinois EPA for review and approval for the initial testing and if a significant change in the procedures for this testing is planned from the procedures followed in the previous test. This plan shall be submitted at least 60 days prior to the actual date of testing and include the following information as a minimum:

- i. A description of the planned test procedures.
- ii. The person(s) who will be performing sampling and analysis and their experience with similar tests.
- iii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means or manner by which the operating parameters for the emission unit and any control equipment will be determined.
- iv. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations.
- v. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods.

- c. The Permittee shall notify the Illinois EPA prior to conducting these measurements to enable the Illinois EPA to observe testing. Notification for the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may accept shorter advance notice if it does not interfere with the Illinois EPA's ability to observe testing.
- d. Copies of the Final Report(s) for these tests shall be submitted to the Illinois EPA within 30 days after the test results are compiled and finalized but no later than 60 days after completion of sampling. The Final Report shall include as a minimum:
 - i. General information, i.e., date of test, names of testing personnel, and names of Illinois EPA observers.
 - ii. A summary of results, e.g., PM or VOM emissions, lbs/hour and gr/scf or ppmv.
 - iii. A detailed description of operating conditions of the emission unit(s) during testing, including:
 - A. Process information, e.g., type or product and operating rate.
 - B. Control system operating parameters during testing, e.g., flow rate, ph of scrubbant and % LEL.
 - iv. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
 - v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
 - vi. Conclusions.
- f. The Permittee shall retain copies of emission test reports for at least three years beyond the date that an emission test is superseded by a more recent test.

3.2 Opacity Observations

- a. Opacity of emissions shall be determined during representative weather and operating conditions by a qualified observer in accordance with USEPA Test Method 9, as further specified below.
- b. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average

opacities for the first 12 minutes of observations (two six-minute averages) are both no more than half of the most stringent requirement applying to opacity.

- c.
 - i. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of these tests, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the qualified observer(s).
 - ii. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.
- d. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.
- e. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:
 - i. Date and time of testing.
 - ii. Name and employer of qualified observer, with a copy of his or her current certification.
 - iii. Description of observation condition, including recent weather.
 - iv. Description of the operating conditions of the affected operation or unit.
 - v. Opacity determinations, accompanied by raw data.
 - vi. Conclusions.
- f. The Permittee shall retain copies of test reports for at least three years after the date that a test is superseded by a more recent test.

3.3 General Requirements for Logs

- a. Operating logs required by this permit shall, at a minimum, include the following information:
 - i. Information identifying periods when an emission unit or group of related emission units was not in service.
 - ii. For periods when a unit or group of related units is in service and operating normally, relevant process information to generally confirm normal operation.
 - iii. For periods when a unit or group of related units is in service and is not operating normally, identification of

each such period, with detailed information describing the operation of the unit(s) and the potential consequences for additional emissions from unit(s), with explanation.

- b. Inspection, maintenance and repair logs required by this permit shall, at a minimum, include the following information:
 - i. Identification of equipment, with date, time, responsible employee and type of activity.
 - ii. For inspections, a description of the inspection, findings, and any recommended actions, with reason.
 - iii. For maintenance and repair activity, a description of actions taken, reason for action, e.g., preventative measure or corrective action as a result of inspection, and the condition of equipment following completion of the activity.
- c. The logs required by this permit may be kept in manual or electronic form, and may be part of a larger information database maintained by the Permittee provided that the information required to be kept in a log is readily accessible.

3.4 Reporting of Deviations

- a. Unless otherwise specified in a particular condition of this permit, if deviation(s) from requirements of this permit occur, the Permittee shall submit a deviation report immediately for emission violations and within 30 days of the actual occurrence for any other violations. The Permittee shall include the following information in reports of deviations:
 - i. Identify the deviation, with date, time, duration and description.
 - ii. Describe the effect of the deviation on compliance, with an estimate of the excess emissions that accompanied the deviation, if any.
 - iii. Describe the probable cause of the deviation and any corrective actions or preventive measures taken.
- b.
 - i. A deviation shall be considered to continue even if operation an emission unit is interrupted if the deviation is still present when operation of the unit is resumed.
 - ii. When this permit requires immediate notification, such notification shall be provided by telephone and followed by facsimile or e-mail transmittal of a narrative report.
- c. Upon inclusion of this permit into the Title V permit, the semi-annual monitoring requirements and annual compliance certification will supersede the requirements of this permit.

Attachment 1: Summary of Emissions Increases from the Project

| Units | Emissions (Tons/Year) | | | | | |
|----------------------------------------|-----------------------|------------------|-----------------|-----------------|--------|--------|
| | PM | PM ₁₀ | NO _x | SO ₂ | CO | VOM |
| Germ Receiving & Handling ^a | 0.18 | 0.08 | --- | --- | --- | --- |
| Germ Processing ^a | 3.89 | 3.89 | --- | --- | --- | --- |
| Oil Extraction ^{a, b} | 5.61 | 5.61 | --- | --- | --- | 112.89 |
| Meal Processing ^a | 0.35 | 0.24 | --- | --- | --- | d |
| Feedhouse ^a | 2.28 | 2.03 | --- | --- | --- | d |
| Corn Oil Refinery ^a | <0.01 | <0.01 | --- | --- | --- | d |
| Cogeneration Boilers ^{a, c} | 0.74 | 0.74 | 8.69 | 16.94 | 2.08 | 0.04 |
| Plant Roads ^a | 3.02 | 0.71 | --- | --- | --- | --- |
| Total Increase | 16.08 | 13.31 | 8.69 | 16.94 | 2.08 | 112.93 |
| PSD Threshold | 25.00 | 15.00 | 40.00 | 40.00 | 100.00 | 40.00 |
| Significant Yes/No | No | No | No | No | No | Yes |

- a. The increase in emissions for these units is the difference between projected actual emissions and baseline actual emissions as provided in the application, which may exclude increased emissions that could have occurred without the project and are unrelated to this project, as provided for by 40 CFR 52.21(b)(4)(ii)(c).
- b. The increase in PM emissions from these units is the difference between projected actual emissions and baseline actual emissions for units other than the new DTDC. The increases in PM emissions from this new DTDC are its potential emissions, without consideration for any decreases in emissions from the existing DTDC, which it will replace.
- c. The increases in emissions from increased operation of the cogeneration plant are based on a projected maximum increase in steam demand from the West Corn Germ Processing Plant of 9,000 pounds per hour.
- d. Emissions of VOM from these units are addressed in oil extraction.

KLS:psj