

IN THE MATTER OF:
PERDUE FARMS, INC.

* **BEFORE THE MARYLAND**
* **DEPARTMENT OF**
* **THE ENVIRONMENT**

* * * * *

CONSENT ORDER

This CONSENT ORDER ("Order") is issued pursuant to the authority vested in the Maryland Department of the Environment (the "Department") by Titles 1, 2 and 6 of the Environment Article of the Maryland Code and by the Code of Maryland Regulations (COMAR) 26.11 to regulate air pollution in the State of Maryland and to enforce State air pollution control laws and regulations.

WHEREAS, Perdue Farms, Inc. (the "Company") owns and operates a facility to extract oil from soybeans located at 6906 Zion Church Road, in Wicomico County, Maryland (the "Facility").

WHEREAS, the soybean oil extraction process involves heating soybeans, pressing them into thin "flakes", and extracting oil by rinsing the flakes with a hexane based solvent. The solvent is then removed from the solvent/oil mixture and the flakes and is condensed and reused. Hexane is a volatile organic compound (VOC);

WHEREAS, the soybean oil extraction process consists of an extractor, desolventizing toaster, and other processing and recovery installations;

WHEREAS, the extractor involves the recovery of oil from the soybean flakes by washing them with hexane in five stages;

WHEREAS, the desolventizing toaster removes hexane from the soybean flakes through the use of steam at a temperature between 150° and 190° F;

WHEREAS, much of the processing for the soybean oil extraction is done under vacuum and has the potential to cause fugitive emissions of VOCs;

WHEREAS, the final VOC exhaust vent in the process, which is the primary hexane emissions point, is equipped with a water cooled condenser that reduces hexane losses to the air;

WHEREAS, the VOC emissions from the soybean extraction process are subject to the State of Maryland air pollution control laws and regulations, including the requirement under COMAR 26.11.19.02G; to comply with reasonably available control technology (RACT), which has not previously been defined in connection with soybean oil extraction operations;

WHEREAS, the Company has identified and implemented the following VOC RACT measures in order to reduce hexane emissions from the Facility:

(1) Installed and operates a Drager automatic VOC leak monitoring system at the Facility. This system was installed and is operated in accordance with the manufacturers specifications with appropriate set points to provide warning of leaks from the process;

(2) Operates a mineral oil absorption system on the final VOC exhaust vent in accordance with the manufacturer's recommendations using groundwater as the cooling source that does not exceed 60° F;

(3) Installed screened sections in the desolventizing toaster to better provide product/steam contact to improve hexane recovery;

(4) Installed a 10-inch diameter vapor line from the extractor to the distillation system to improve vacuum control in the extraction system; and

(5) In order to minimize the loss of hexane in the soybean extraction process, prepared a standard operating procedures (SOP) document for the efficient operation of the soybean extraction process and a training manual which clearly and concisely identifies the operation of the process that is used for training new and existing operators. The manual includes good operating practices that will minimize VOC emissions and maximize hexane recovery;

WHEREAS, in addition to the foregoing, the Company has agreed to limit VOC emissions from the Facility to 0.3 gallons per ton of soybeans processed in a calendar year to comply with RACT requirements;

WHEREAS, total uncontrolled VOC emissions from the soybean extraction process vary with production and exceed the major source threshold for VOC emissions; and

WHEREAS, the Facility is also subject to 40CFR63 Subpart GGGG, National Emission Standards for Hazardous Air Pollutants – Solvent Extraction for Vegetable Oil Production. Nothing in this Consent Order shall be construed to relieve the Company of its obligation to comply with the requirements of Subpart GGGG.

ORDER

Now, therefore, the Department hereby orders, and Company hereby consents to the following terms and conditions:

1. Maintain compliance with the VOC RACT measures which have been implemented to date.
2. The Company agrees to limit VOC emissions from the Facility to 0.3 gallons of VOC per ton of soybeans processed in a calendar year in order to comply with RACT.
3. The Company agrees to prepare an annual hexane emissions report. The report shall be prepared by no later than February 15 of the year following the subject year and be made available to the Department upon request.
4. Maintain, and update as necessary, the SOP document, the training manual and the good operating practices and make such documents available to the Department upon request.
5. Maintain the records required by this Order for at least 5 years.
6. Notwithstanding the terms and conditions of this Order and the Company's compliance with it, if the Company makes changes in the installations or processes subject to this Order which may pose a threat to the environment or public health, or if the Department ascertains facts concerning the installations or processes subject to this Order which the Department determines may pose a threat to the environment or public health, the Department may order the Company to take additional correctional measures to eliminate or alleviate such impacts. The Department stipulates that the Company has not waived any rights it may have to contest such an Order in accordance with applicable law and regulations.
7. The provisions of this Order shall apply to and be binding upon the Company, its successors and assigns. Prior to the transfer by the Company of any legal or equitable interest in the

Facility, the Company shall present a copy of this Order to the prospective successor in interest.

8. It is the intent of the parties that the provisions of this Order are severable and that, should any provisions be declared by a court of law to be invalid or unenforceable, the other provisions shall remain in effect to the maximum extent reasonable. This Consent Order shall be governed by and construed in accordance with Maryland law.
9. The Company acknowledges that a violation of this Order constitutes a violation of law for which the Department may seek penalties through appropriate administrative or judicial proceedings, and further acknowledges that the Department may compel compliance with this Order by commencing a civil proceeding in a court of appropriate jurisdiction.

This Consent Order is agreed to and the terms and conditions herein consented to:

1/7/05
Date

PERDUE FARMS, INC.

By: Roger Conway

Title: Vice President Soy OPERATIONS

DEPARTMENT OF THE ENVIRONMENT

2/1/05
Date

Thomas C. Snyder

Thomas C. Snyder, Director

Air and Radiation Management Administration

Approved as to form and legal sufficiency this 2/1st day of Jan. 2005.

Deirdre A. Smith
Attorney General's Office

L:\AQPlanning and Monitoring\Regulation Development Division\VOC RACT\Perdue - for Company Signature

TITLE 26 - DEPARTMENT OF THE ENVIRONMENT

SUBTITLE 11 - AIR QUALITY

CHAPTER 01 - GENERAL ADMINISTRATIVE PROVISIONS

* * *

.02 - Relationship of Provisions in this Subtitle.

Unless otherwise expressly provided in this subtitle, the provisions of this subtitle are cumulative and each provision applies to each applicable source or installation and to each person in control of the source or installation.

.03 - Delineation of Areas.

- A. Area I means the western area of the State comprising the counties of Allegany, Garrett, and Washington.
- B. Area II means the central area of the State composed of Frederick County.
- C. Area III means the Baltimore metropolitan area of the State comprising Baltimore City and the counties of Anne Arundel, Baltimore, Carroll, Harford, and Howard.
- D. Area IV means the Washington metropolitan area of the State comprising the counties of Montgomery and Prince George's.
- E. Area V means the southern area of the State comprising the counties of Calvert, Charles, and St. Mary's.
- F. Area VI means the eastern shore area of the State comprising the counties of Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester.

.04 - Testing and Monitoring.

A. Requirements for Testing.

(1) The Department may require any person to conduct or have conducted testing to determine compliance with this subtitle. The Department, at its option, may witness or conduct these tests. This testing will be done at a reasonable time, and all information gathered during a testing operation will be provided to both parties.

(2) Compliance with this subtitle shall be determined by the test methods designated and described in Section C, Emission Test Methods, and shall be applicable to both new and existing stationary emission sources. These test methods may be modified or adjusted by the Department

to meet the requirements at certain types of sources, specific sampling conditions and the need to incorporate advances and other new information relating to testing technology.

(3) When the Department conducts or has these tests conducted, the person shall provide the sampling facilities, exclusive of instruments and sensing devices, that are necessary to determine the quantity of emissions.

(4) Any registrable installation constructed after January 4, 1971, shall be provided with openings in the exhaust gas ductwork or in the stack or chimney as required by the test methods specified in Section A(2), above, to enable the collection of samples of the effluent to the atmosphere from this installation. Upon request of the Department, the owner or operator of this installation shall provide appropriate scaffolding which meets OSHA standards as set forth in 29 CFR Chapter XVII Part 1910.

B. Requirements for Monitoring.

(1) The Department or the control officer may require a person responsible for any installation to install, use, and maintain monitoring equipment or employ other methods as specified by the Department or the control officer to determine the quantity or quality, or both, of emissions discharged into the atmosphere and to maintain records and make reports on these emissions to the Department or the control officer in a manner and on a schedule approved by the Department or the control officer.

(2) The Department or the control officer, at reasonable times, shall have access to and be permitted to copy any records, inspect any monitoring equipment or methods required under this section.

(3) Except when otherwise specified by the Department or the control officer, records required under this regulation shall be retained by the person responsible for the installation and shall be available for inspection by the Department and the control officer for a period of not less than 90 days.

(4) All records and reports submitted to the Department or the control officer required under this regulation shall be available for public inspection.

C. Emission Test Methods. Test methods used shall be those found in:

(1) 40 CFR Part 60, Appendix A, 1990 edition, which is incorporated by reference; or

(2) The Department's Technical Memorandum 91-01 "Test Methods and Equipment Specifications for Stationary Sources", January, 1991, as amended through Supplement 3 (October 1, 1997), which is incorporated by reference.

.05 - Records and Information.

A. The Department may require a person who owns or operates an installation or source to establish and maintain records sufficient to provide the information necessary to:

(1) Assist the Department in the development of an implementation plan, air emissions standard, equipment performance standard, or material formulation standard;

(2) Determine compliance with an air emissions standard, equipment performance standard, material formulation standard, or permit condition;

(3) Verify or update registration information; or

(4) Update Maryland's air emissions inventory.

B. A person who is required pursuant to §A of this regulation to establish and maintain records shall:

(1) Maintain the necessary information in a format approved by the Department; and

(2) Submit written reports, when requested by the Department, summarizing the information in a format approved by the Department and on a schedule specified by the Department.

.05-1 - Emissions Statements.

A. Applicability. This regulation applies to a person who owns or operates any installation, source, or premises that is located in:

(1) Baltimore City, or in Anne Arundel, Baltimore, Calvert, Carroll, Cecil, Charles, Frederick, Harford, Howard, Kent, Montgomery, Prince George's or Queen Anne's counties, and has total actual emissions of either VOC or NO_x from all installations and sources on a premises of 25 tons or more during a calendar year;

(2) Allegany, Caroline, Dorchester, Garrett, St. Mary's, Somerset, Talbot, Washington, Wicomico, or Worcester counties, and has total actual emissions of either VOC or NO_x from all installations and sources on a premises of 50 tons or more of VOC or 100 tons or more of NO_x during a calendar year.

B. General Requirements.

(1) By April 1 of each year, beginning with April 1, 1993, a person subject to this regulation shall submit to the Department an emissions statement for the previous calendar year that meets the requirements of this regulation.

(2) A person submitting an emissions statement shall certify that the information in the emissions statement is accurate to the person's best knowledge. The certifying individual shall be:

(a) Familiar with each installation and source for which the statement is submitted; and

(b) Responsible for the accuracy of the statement.

(3) If actual emissions from a source or premises for any year after calendar year 1992 equal or exceed the applicable emission levels prescribed in Section A(1) or (2) of this regulation, an emissions statement is required for that year and each following year unless the source demonstrates, to the satisfaction of the Department, that emissions have been permanently reduced and the source no longer has the potential to emit emissions that exceed the applicable levels.

C. Emissions Statement Content. Emissions statements required by Section B of this regulation shall be organized by premises, submitted on a form obtained from the Department, and include the following information:

(1) Identification of each installation or source at the premises that discharges VOC or NOx, and the actual daily and annual emissions from each installation or source;

(2) An explanation of the method used to determine emissions from each installation or source and operating schedules and production data that were used to determine emissions;

(3) Beginning with the emissions statement for calendar year 1993, an explanation for any increases or decreases in emissions for each installation or source if reported emissions differ from the emissions reported in the previous year's emissions statement; and

(4) Other relevant information as required by the Department.

.06 - Circumvention.

A person may not install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total weight of emissions, conceals or dilutes an emission which would otherwise constitute a violation of any applicable air pollution control regulation.

.07 - Malfunctions and Other Temporary Increases of Emissions.

A. Definitions.

(1) "Excess emissions" means an emission rate which exceeds any applicable emission standard set forth in this subtitle unless the emission rate is in compliance with an approved plan

for compliance, departmental order, consent order, or condition of a permit.

(2) "Malfunction" means sudden and unavoidable failure of an installation to operate in a normal and usual manner. Failures that are caused entirely or in part by inadequate design, poor maintenance, careless operation, preventable upset conditions, or preventable equipment breakdown may not be considered malfunctions.

B. Unless otherwise required by law, the Department will consider any period of excess emissions to be a violation of law, regardless of the cause. Information submitted pursuant to Sections C and D of this regulation will be considered, however, in determining whether the excess emissions are the result of a malfunction and whether to commence an administrative or judicial proceeding authorized by State and federal law.

C. Report of Excess Emissions.

(1) In the case of any occurrence of excess emissions, expected to last or actually lasting for 1 hour or more, from any installation required by COMAR 26.11.02.13 to obtain a State permit to operate, the owner or operator shall report the onset and shall report the termination of the occurrence to the Department by telephone.

(2) Telephone reports of excess emissions shall include the following information:

- (a) The identity of the installation and the person reporting;
- (b) The nature or characteristics of the emissions (for example, hydrocarbons, fluorides);
- (c) The time of occurrence of the onset of the excess emissions and the actual or expected duration of the occurrence; and
- (d) The actual or probable cause of the excess emissions.

D. Written Report of Excess Emissions.

(1) When requested by the Department, the owner or operator of any installation from which excess emissions have occurred shall submit a written report to the Department within 10 days of receiving the request.

(2) The report shall set forth the following information:

- (a) The identity of the installation;
- (b) The nature or characteristics of the emissions (for example, hydrocarbon, fluorides);

- (c) The time of occurrence of the onset of the excess emissions and the duration of the occurrence;
- (d) The actual or estimated quantity of excess emissions during the occurrence, and operating data and calculations used in determining the quantity;
- (e) The actual or probable cause of the occurrence and whether the owner or operator contends that the cause is a malfunction;
- (f) The method of correcting the cause of the excess emissions and minimizing the duration and magnitude of the occurrence, including, if applicable, the use of overtime or contractual assistance to make repairs as expeditiously as possible;
- (g) A listing of all occurrences of excess emissions from the installation, the duration of each occurrence, and the cause of each occurrence for the last 1-year period or since the effective date of this regulation, whichever is less;
- (h) A copy of the maintenance plan for the installation and documentation that the plan is appropriate for the installation;
- (i) Documentation that the maintenance plan was being carried out before the occurrence of excess emissions;
- (j) The steps taken or planned to prevent the reoccurrence of the excess emissions; and
- (k) Any other information requested by the Department which is relevant to the occurrence of excess emissions or a claim by the owner or operator that the excess emissions were the result of a malfunction. E. Notwithstanding any provisions to Sections A - D, above, a decision by the Department not to commence enforcement proceedings for an occurrence of excess emissions is not intended to preclude the Department from considering all past periods of excess emissions in determining whether to revoke or suspend a current operating permit or not to issue an operating permit for a future period of time. F. The Department may exempt the owner or operator of any installation from the reporting requirements of Section C if it determines that other information submitted to the Department meets the requirements of Section C or the information is of insignificant use to the Department.

.08 - Determination of Ground Level Concentrations - Acceptable Techniques.

A. Definitions.

(1) "Major modification" means any modification as defined in 40 CFR Parts 51 and 52, 1985 edition.

(2) "State Implementation Plan" means the plan required by the Federal Clean Air Act, 42 U.S.C. Section 7410, which the State adopts and submits to the United States Environmental Protection Agency showing attainment and maintenance of National Ambient Air Quality Standards.

(3) "Unacceptable dispersion technique" means any dispersion technique as defined in 40 CFR Part 51, 1985 edition, as amended, 50 FR 27906 - 27907 (July 8, 1985: Stack Height Regulation).

B. Exemptions.

(1) This regulation does not apply to any stack height in existence or dispersion technique implemented on or before December 31, 1970, except when a source using a stack or dispersion technique undergoes a major modification after December 31, 1970.

(2) This regulation does not apply to the calculation of ground level concentrations of toxic air pollutants for the purpose of demonstrating compliance with COMAR 26.11.15.06.

C. Dispersion Technique. A person may not use an unacceptable dispersion technique to determine the ground level concentrations of air pollutants discharged from a source, in order to obtain:

(1) An approval or permit under this subtitle;

(2) A revision to the State Implementation Plan; or

(3) A Certificate of Public Convenience and Necessity under Article 78, Sections 54A and 54B, or Section 54H, Annotated Code of Maryland.

.09 - Vapor Pressure of Gasoline.

[See Figure- Document 26.11.01.09, Figure 1]

.10 - Continuous Emission Monitoring (CEM) Requirements.

A. Applicability and Exceptions.

(1) The provisions of this regulation apply to a person that owns or operates any fuel burning equipment burning coal or fuel oil that has a rated heat input capacity of 250 million Btu per hour or greater.

(2) A person subject to this regulation may also be subject to the requirements of 40 CFR Part 60 which is incorporated by reference.

(3) A CEM is not required for fuel burning equipment that:

- (a) Burns only distillate fuel oil or a mixture of gas and distillate fuel oil;
- (b) Is able to comply with the applicable particulate matter and opacity regulations without utilization of particulate matter control equipment; and
- (c) Has never been found in a final order to be in violation of any visible emission standard.

B. Monitoring Requirements

(1) Except as provided in Section A of this regulation, a person owning or operating fuel burning equipment with a heat input capacity of 250 million Btu per hour or greater and burning coal or fuel oil shall install and operate a CEM to measure and record opacity.

(2) Any CEM that is required by this regulation shall be operated, maintained, and calibrated to provide continuous valid data for each operating day, except that data is not required to be provided during:

- (a) The time required under an approved quality assurance plan to perform adjustments, checks, calibrations, and scheduled maintenance; and
- (b) CEM equipment malfunctions lasting not more than 2 hours per operating day.

(3) Except as otherwise approved by the Department, a person who reports a CEM system downtime in accordance with Section G(1) of this regulation may be required to use an alternative monitoring method approved by the Department.

C. General CEM Installation Requirements.

(1) A person subject to this regulation shall submit a CEM plan containing the CEM design specifications, proposed location, and a description of the proposed alternative measurement method required by Regulation .11B(7) of this chapter to the Department for approval before installation of the CEM.

(2) A person who is required by this regulation to install a CEM shall comply with the applicable requirements in 40 CFR Part 51, Appendix P, Sections 3.3-3.8, which is incorporated by reference, and if an alternative procedure is to be used, in Section 3.9. Alternative procedures shall be submitted to the U.S. EPA for approval.

D. CEM Installation and Certification Schedules.

(1) A person subject to this regulation or Regulation .11 of this chapter shall have all required CEM equipment installed, operating, maintained, calibrated, and certified not later than

12 months after the effective date of this regulation unless an alternative date is specified in an approved plan for compliance.

(2) All certification testing, including certification performance tests and audits, shall be performed in accordance with 40 CFR Part 60, Appendix B, which is incorporated by reference.

(3) A person required to perform a certification performance test shall:

(a) Submit a test protocol to the Department at least 60 days before the test for review and approval by the Department;

(b) Schedule the test at a reasonable time and notify the Department at least 10 days before the test is to be conducted; and

(c) Submit the test results to the Department not later than 45 days after the completion of the test.

E. Quality Assurance Procedures for Opacity Monitors. An opacity monitor required by this regulation or Regulation .11 of this chapter shall meet the quality assurance procedures established in the Department's Air Management Administration Technical Memorandum 90-01 "Continuous Emission Monitoring (CEM) Policies and Procedures" (October, 1990), which is incorporated by reference.

F. Use of CEM Data. Except as provided in Regulation .11D(1) of this chapter, an opacity CEM installed pursuant to this regulation shall be used as an indication of whether proper maintenance and operating procedures are being utilized by source operators to maintain emission levels at or below emission standards.

G. Record Keeping and Reporting Requirements.

(1) CEM System Downtime Reporting Requirements.

(a) All CEM system downtime that lasts or is expected to last more than 24 hours shall be reported to the Department by telephone before 10 a.m. of the first regular business day following the breakdown.

(b) The system breakdown report required by Section G(1)(a) of this regulation shall include the reason, if known, for the breakdown and the estimated period of time that the CEM will be down. The owner or operator of the CEM shall notify the Department by telephone when an out-of-service CEM is back in operation and producing valid data.

(2) CEM Data Reporting Requirements.

(a) An opacity CEM shall automatically reduce all data to 6-minute block averages calculated from 36 or more equally spaced data points.

(b) All test results shall be reported in a format approved by the Department.

(c) Certification testing shall be repeated when the Department determines that the CEM data may be invalid because of component replacement or other conditions that affect the quality of generated data.

(d) A quarterly summary report shall be submitted to the Department not later than 30 days following each calendar quarter. The report shall be in a format approved by the Department, and shall include the following:

(i) The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards;

(ii) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;

(iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the validity of emission data;

(iv) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter;

(v) Quarterly quality assurance activities; and

(vi) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this regulation.

(e) All information required by this regulation to be reported to the Department shall be retained and made available for review by the Department for a minimum of 2 years from the time the report is submitted.

.11 [Not in SIP]