STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Delta Oil Mill
2015 West River Road
Greenwood, Mississippi
Leflore County

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

Permit Issued: OCT 0 9 2012

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: September 30, 2017 **Permit No.: 1560-00050**

2192 PER20110001

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SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (Ref.: APC-S-6, Section III.A.6.a.)

1.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (Ref.: APC-S-6, Section III.A.6.b.)

1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (Ref.: APC-S-6, Section III.A.6.c.)

1.4 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: APC-S-6, Section III.A.6.d.)

1.5 The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. (Ref.: APC-S-6, Section III.A.6.e.)

1.6 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref.: APC-S-6, Section III.A.5.)

1.7 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation APC-S-6.

(a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual

emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: APC-S-6, Section VI.A.2.)

(b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee. (Ref.: APC-S-6, Section VI.A.2.) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time. (Ref.: APC-S-6, Section VI.D.2.)

(c) The fee shall be due September 1 of each year. By July 1 of each year the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the DEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due. (Ref.: APC-S-6, Section VI.D.)

(d) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition. (Ref.: APC-S-6, Section VI.C.)

1.8 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (Ref.: APC-S-6, Section III.A.8.)

1.9 Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (Ref.: APC-S-6, Section II.E.)

1.10 The permittee shall allow the DEQ, or an authorized representative, upon the

presentation of credentials and other documents as may be required by law, to perform the following:

(a) enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;

(b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

(d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. (Ref.: APC-S-6, Section III.C.2.)

1.11 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere. (Ref.: APC-S-1, Section 3.9(a))

1.12 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970. (Ref.: APC-S-1, Section 3.9(b))

1.13 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source. (Ref.: APC-S-6, Section III.F.1.)

1.14 Nothing in this permit shall alter or affect the following:

(a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;

(b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

(c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.

(d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act. (Ref.: APC-S-6, Section III.F.2.)

1.15 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan. (Ref.: APC-S-6, Section III.H.)

1.16 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application. (Ref.: APC-S-6, Section IV.C.2., Section IV.B., and Section II.A.1.c.)

1.17 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:

(a) the changes are not modifications under any provision of Title I of the Act;

(b) the changes do not exceed the emissions allowable under this permit;

(c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:

(1) a brief description of the change(s),

(2) the date on which the change will occur,

(3) any change in emissions, and

(4) any permit term or condition that is no longer applicable as a result of the change;

(d) the permit shield shall not apply to any Section 502(b)(10) change. (Ref.: APC-S-6, Section IV.F.)

1.18 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in Regulation APC-S-3, "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: APC-S-3)

1.19 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations APC-S-2, "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and

may require modification of this permit in accordance with Regulations APC-S-6, "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

(a) routine maintenance, repair, and replacement;

(b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

(c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;

(d) use of an alternative fuel or raw material by a stationary source which:

(1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; or

(2) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;

(e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or

(f) any change in ownership of the stationary source."

1.20 Any change in ownership or operational control must be approved by the Permit Board. (Ref.: APC-S-6, Section IV.D.4.)

1.21 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission. (Ref.: APC-S-6, Section III.B.1)

1.22 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up

operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.

(a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.

(b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.

(c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator. (Ref.: APC-S-1, Section 3.7)

1.23 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies.

(a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

(b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.

(c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:

(1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;

(2) the permitted facility was at the time being properly operated;

(3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

(e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein. (Ref.: APC-S-6, Section III.G.)

1.24 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, shutdowns and maintenance.

(a) Upsets (as defined by APC-S-1, Section 2.37)

(1) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:

(i) an upset occurred and that the permittee can identify the cause(s) of the upset;

(ii) the source was at the time being properly operated;

(iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;

(iv) the permittee submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and

(v) the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.

(2) In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

(3) This provision is in addition to any upset provision contained in any applicable requirement.

(b) Startups and Shutdowns (as defined by APC-S-1, Sections 2.34 & 2.29)

(1) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows:

(i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above;

(ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or

(iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit.

(2) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof.

(3) In the event this startup and shutdown provision conflicts with another applicable requirement, the more stringent requirement shall apply.

(c) Maintenance.

(1) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following:

(i) the permittee can identify the need for the maintenance;

(ii) the source was at the time being properly operated;

(iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;

(iv) the permittee submitted notice of the maintenance to the DEQ within 5 working days of the time the maintenance began or such other times as allowed by DEQ; and

(v) the notice shall contain a description of the maintenance, any steps

taken to mitigate emissions, and corrective actions taken.

(2) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof.

(3) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. (Ref.: APC-S-1, Section 10)

1.25 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Regulation APC-S-1, Section 8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-001	25.11 MMBTU/hr Natural Gas or No. 2 Fuel Oil Fired Process Steam Boiler
AA-002	25.11 MMBTU/hr Natural Gas or No. 2 Fuel Oil Fired Process Steam Boiler
AB-001	Oilseed Receiving Dump – West Dump
AB-002	Oilseed Receiving Dump – East Dump
AB-003	Cottonseed Receiving Dump – Far Dump, equipped with a cyclone that vents inside the building.
AB-005	Soybean/Black Seed Receiving Pit
AB-006	Oilseed/Meal Railcar Receiving Pit
AC-001 – AC-008	Seed Houses No. 1 through No. 8
AC-009	Hull House
AC-010	Meal House
AC-011	Hammermill Dust
AC-012	Baler Room Dust
AD-001 – AD-003	Cottonseed Storage Tanks No. 1 through No. 3
AD-006 – AD-009	Soybean/Black Seed Storage Tanks No. 1 through No. 4
AD-010	Day Bin Oilseed Storage Tank
AD-011	Soybean/White Seed Storage Tank
AD-12	Oilseed Meats Tank
AD-013	Meal Tanks
AE-001	Soybean/Seed Tank No. 1 Overflow Spout
AE-002	Soybean/Day Bin Overflow Spout
AE-003	Soybean/White Seed Surge Tank Overflow Spout
AE-004	Soybean/Black Seed Tank Overflow Spout – North
AE-005	Soybean/Black Seed Tank Overflow Spout – South
AE-006	Meats Tank Overflow Spout
AE-007	Meats Drop Overflow Spout
AF-001 – AF-005	Seed Cleaner Cyclones
AG-001 – AG-014	A-Side Delinting Cyclones
AI-001 – AI-003	Lint Transfer Cyclones
AJ-001 – AJ-003	Solvent Extraction Plant Dryer/Cooler Cyclones
AJ-004	The Solvent Extraction Plant Final Vent

Emission Point	Description
AJ-005	The Solvent Extraction Plant fugitive emissions and two (2) hexane storage tanks (15,863 and 14,700 gallons) constructed prior to 1984
AK-001	Outr-A-Vac Filtration System
AK-002	Outr-A-Vac Filtration System
AK-003	Outr-A-Vac Filtration System
AL-001	Meal Loadout
AL-005	Hull Loadout
AL-010	Loadout of Cottonseed to Trucks
AL-011	Soybean Hulls/Black Seed Loadout
AL-015	Cottonseed Loadout to Railcars, which includes emissions associated with the process that are not collected by the Cottonseed Loadout to Railcar Cyclone (AL-016)
AL-016	Cottonseed Loadout to Railcar Cyclone
AM-001 – AM-003 & AM-005 – AM-008	Seed House Cooling Fans
AN-001	Fugitive emissions from vehicle traffic

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. Facility-Wide Emission Limitations & Standards

3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).

(a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.

(b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour. (Ref.: APC-S-1, Section 3.1)

3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Paragraph 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets. (Ref.: APC-S-1, Section 3.2)

B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001, AA-002	APC-S-1, Section 3.4(a)(2)	3.B.1	PM/ PM_{10}	$E = 0.8808 * I^{-0.1667}$
	APC-S-1, Section 4.1(a)	3.B.2	SO_2	4.8 lbs/MMBTU
	TVOP issued June 6, 2007	3.B.3	Sulfur Content	≤ 0.5 percent by weight
AA-001, AA-002	40 CFR 63, Subpart DDDDD (§63.7480-7575)	3.B.4	Vary depending on fuel usage	Emission limits, work practices, and operating limits are provided in Tables 2, 3, and 4 of Subpart DDDDD.
Facility-Wide	APC-S-1, Section 3.6(a) and TVOP issued June 6, 2007	3.B.5	PM/ PM_{10}	$E = 4.1 (p)^{0.67}$, where p shall not exceed an oilseed receiving rate of ***450 tons/hour***.
		3.B.6	Cottonseed Receiving Limit	625,000 TPY
			Cottonseed Prod. Limit	603,000 TPY
	TVOP issued June 6, 2007	3.B.7	Soybean Receiving Limit	360,000 TPY
AB-001, AB-002	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM	22.50 lb/hr (per emission point)
			PM_{10}	7.38 lb/hr (per emission point)
			Throughput	125 tons/hr (per emission point)

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AB-003	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10} Throughput	27.00 lb/hr 8.85 lb/hr 150 tons/hour
AB-005	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10} Throughput	2.25 lb/hr 0.74 lb/hr 50 tons/hour
AB-001 through AB-003 and AB-005	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	56.25 TPY (total for emission point group) 18.44 TPY (total for emission point group)
AB-006	TVOP issued June 6, 2007	3.B.9	Throughput	240,000 TPY
AC-001, AC-002, AC-003, AC-004, AC-005	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	1.53 lb/hr (per emission pt.) 0.85 lb/hr (per emission pt.)
AC-006, AC-007, AC-008	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	1.91 lb/hr (per emission pt.) 1.06 lb/hr (per emission pt.)
AC-001 through AC-008	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	1.20 TPY (total for emission point group) 0.67 TPY (total for emission point group)
AC-009	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	1.91 lb/hr and 1.26 TPY 1.06 lb/hr and 0.70 TPY
AC-010, AC-011	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	0.53 lb/hr and 2.24 TPY (per emission pt.) 0.30 lb/hr and 1.25 TPY (per emission pt.)
AC-012	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	0.11 lb/hr and 0.45 TPY 0.06 lb/hr and 0.25 TPY
AD-001	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	0.28 lb/hr 0.07 lb/hr
AD-002, AD-003	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	0.59 lb/hr (per emission pt.) 0.15 lb/hr (per emission pt.)
AD-001 through AD-003	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	0.78 TPY (total for emission point group) 0.20 TPY (total for emission point group)
AD-006 through AD-009	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	0.15 lb/hr (per emission pt.) and 0.65 TPY (total) 0.04 lb/hr (per emission pt.) and 0.16 TPY (total)
AD-010	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	0.15 lb/hr and 0.66 TPY 0.04 lb/hr and 0.17 TPY

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AD-011	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	0.02 lb/hr and 0.09 TPY 0.01 lb/hr and 0.02 TPY
AD-012	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	0.10 lb/hr and 0.44 TPY 0.03 lb/hr and 0.11 TPY
AD-013	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	0.03 lb/hr and 0.01 TPY 0.01 lb/hr and 0.01 TPY
AE-001	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	6.71 lb/hr and 0.38 TPY 3.74 lb/hr and 0.21 TPY
AE-002	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	3.66 lb/hr and 0.32 TPY 2.04 lb/hr and 0.18 TPY
AE-003	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	0.49 lb/hr and 0.04 TPY 0.27 lb/hr and 0.02 TPY
AE-004, AE-005	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	3.66 lb/hr (per emission pt.) and 0.32 TPY (total) 2.04 lb/hr (per emission pt.) and 0.18 TPY (total)
AE-006, AE-007	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	2.44 lb/hr and 0.21 TPY (per emission pt.) 1.36 lb/hr and 0.12 TPY (per emission pt.)
AF-001, AF-002, AF-003, AF-004	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM/PM_{10}	0.92 lb/hr and 3.71 TPY (per emission pt.)
AF-005	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM/PM_{10}	0.90 lb/hr and 3.63 TPY
AG-001 through AG-005, AG-007 through AG-009, AG-011, AG-012, and AG-014	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8 3.B.10	PM/PM_{10} Operation	5.04 lb/hr and 20.31 TPY (per emission pt.) Shall not operate when cyclone is inoperable.
AG-006	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8 3.B.10	PM/PM_{10} Operation	4.90 lb/hr and 19.73 TPY Shall not operate when cyclone is inoperable.
AG-010	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8 3.B.10	PM/PM_{10} Operation	4.18 lb/hr and 16.83 TPY Shall not operate when cyclone is inoperable.
AG-013	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8 3.B.10	PM/PM_{10} Operation	4.20 lb/hr and 16.92 TPY Shall not operate when cyclone is inoperable.

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AI-001, AI-002	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8 3.B.10	PM/PM_{10} Operation	4.32 lb/hr and 17.41 TPY (per emission pt.) Shall not operate when cyclone is inoperable.
AI-003	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8 3.B.10	PM/PM_{10} Operation	0.58 lb/hr and 2.35 TPY Shall not operate when cyclone is inoperable.
AJ-001, AJ-002, AJ-003	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM/PM_{10} VOC	1.45 lb/hr and 5.85 TPY (per emission pt.) 8.84 lb/hr and 35.52 TPY (per emission pt.)
AJ-004	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	VOC	61.28 lb/hr and 246.36 TPY
AJ-005	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	VOC	56.02 lb/hr and 225.20 TPY
AJ-001 through AJ-005	40 CFR 63, Subpart GGGG (§63.2830-72, §63.2840(a-d), and Table 1) PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.11 3.B.12 3.B.13	Hexane/VOC Compliance (HAP Loss) Ratio	Hexane vapors for the solvent plant (Emission Points AJ-001 through AJ-003) shall be condensed in the condenser, and remaining hexane shall be controlled with a chilled mineral oil scrubbing system (Emission Point AJ-004). Monthly compliance ratio of actual HAP loss to allowable HAP loss for the previous 12 operating months must be less than or equal to 1.00.
AK-001, AK-002, AK-003	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007 40 CFR Part 64, CAM	3.B.8 3.B.14	PM/PM_{10}	0.96 lb/hr and 3.87 TPY (per emission pt.) CAM Plan provided in Appendix C.
AL-001 (LO-001)	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	0.86 lb/hr and 0.61 TPY 0.29 lb/hr and 0.21 TPY
AL-001 (LO-002)	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	1.15 lb/hr and 0.42 TPY 0.09 lb/hr and 0.03 TPY
AL-001 (LO-004)	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	2.15 lb/hr and 0.33 TPY 0.73 lb/hr and 0.11 TPY
AL-005 (LO-005)	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	2.15 lb/hr and 2.65 TPY 0.73 lb/hr and 0.89 TPY
AL-005 (LO-007)	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	1.35 lb/hr and 0.83 TPY 0.11 lb/hr and 0.07 TPY
AL-010	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	3.01 lb/hr and 0.95 TPY 1.02 lb/hr and 0.32 TPY

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AL-011 (LO-011)	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	3.01 lb/hr 1.02 lb/hr
AL-011 (LO-012, LO-013)	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	1.62 lb/hr (per emission pt.) 0.13 lb/hr (per emission pt.)
AL-011 (LO-011, LO-012, LO-013)	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	1.16 TPY (total for emission pt. group) 0.39 TPY (total for emission pt. group)
AL-015	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM PM_{10}	0.36 lb/hr and 0.65 TPY 0.12 lb/hr and 0.22 TPY
AL-016 (CL-001, CL-002)	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM/PM_{10}	1.03 lb/hr and 4.14 TPY (per emission pt.)
AM-001 (SF-001a, SF-001b, SF-001c, SF-001d)	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM/PM_{10}	0.01 lb/hr and 0.02 TPY (per emission pt.)
AM-002 (SF-002a, SF-002b)	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM/PM_{10}	0.01 lb/hr and 0.02 TPY (per emission pt.)
AM-003 (SF-003a, SF-003b, SF-003c, SF-003d))	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM/PM_{10}	0.03 lb/hr and 0.06 TPY (per emission pt.)
AM-005	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM/PM_{10}	0.01 lb/hr and 0.02 TPY
AM-006 (SF-006a, SF-006b, SF-006c, SF-006d))	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM/PM_{10}	0.03 lb/hr and 0.06 TPY (per emission pt.)
AM-007 (SF-007a, SF-007b, SF-007c, SF-007d))	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM/PM_{10}	0.03 lb/hr and 0.06 TPY (per emission pt.)
AM-008 (SF-008a, SF-008b, SF-008c, SF-008d))	PSD Construction Permit issued October 9, 1998 and TVOP issued June 6, 2007	3.B.8	PM/PM_{10}	0.03 lb/hr and 0.06 TPY (per emission pt.)

3.B.1 For Emission Points AA-001 and AA-002, the permittee shall not have particulate matter emissions from fossil fuel burning installations of greater than 10 million BTU per hour heat input that exceeds the emission rate as determined by the relationship:

$$E = 0.8808 * I^{-0.1667}$$

where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in million of BTU per hour. (Ref.: APC-S-1, Section 3.4(a)(2))

3.B.2 For Emission Points AA-001 and AA-002, the permittee shall not discharge sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer in excess of 4.8 pounds (measured as sulfur dioxide (SO_2)) per million BTU heat input. (Ref.: APC-S-1, Section 4.1(a))

3.B.3 For Emission Points AA-001 and AA-002, the permittee shall combust only natural gas or No. 2 fuel oil with less than 0.5% sulfur by weight. (Ref.: Title V Operating Permit (TVOP) issued June 6, 2007)

3.B.4 For Emission Points AA-001 and AA-002, the permittee is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for *Major Source* Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD. This subpart establishes emission limits and work practice standards for industrial, commercial, and institutional boilers and process heaters. Emission Points AA-001 and AA-002 are considered existing sources and must comply with all applicable requirements of Subpart DDDDD by the compliance dates established in the final reconsidered rule. Existing sources must comply within three (3) years after publication of the final rule, unless further delayed by EPA. (Ref.: 40 CFR 63, Subpart DDDDD)

For Emission Points AA-001 and AA-002, the permittee must meet the applicable emission limits, work practice standards, and operating limits in 40 CFR 63, Subpart DDDDD. The emission limits are provided in Table 2 of Subpart DDDDD, the work practices are provided in Table 3 (e.g., annual or biennial tune-up and energy assessment), and the operating limits are provided in Table 4. At all times, the permittee must operate and maintain the affected source(s), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Compliance will be based on, but is not limited to, monitoring results, operation and maintenance procedures, and maintenance records and inspections. (Ref.: 40 CFR 63, Subpart DDDDD)

3.B.5 For the entire facility, excluding combustion sources AA-001 and AA-002, the particulate matter emission rate shall not exceed the amount determined by the relationship:

$$E = 4.1\ (p)^{0.67}$$

where E is the emission rate in pounds per hour and p is the process weight input rate in tons per hour. For purposes of this permit, the permittee shall not exceed an oilseed receiving rate (p) of 450 tons per hour. (Ref.: APC-S-1, Section 3.6(a))

3.B.6 The permittee shall not exceed a cottonseed receiving rate of 450 tons per hour and is limited to 625,000 tons per year. In addition, the permittee shall not exceed a cottonseed production limit of 603,000 tons per year. (Ref.: APC-S-1, Section 3.6(a) and TVOP issued June 6, 2007)

3.B.7 The permittee is also limited to 360,000 tons per year of soybeans received. (Ref.:

APC-S-1, Section 3.6(a) and TVOP issued June 6, 2007 and modified thereafter)

3.B.8 For the above referenced emission points, the permittee is limited by the federally enforceable Prevention of Significant Deterioration (PSD) Permit to Construct issued on October 9, 1998, and TVOP issued on June 6, 2007, and modified thereafter.

3.B.9 For Emission Point AB-006, the permittee is limited to 240,000 tons per year of total oilseeds or returned meal combined received via railcar. (Ref.: TVOP issued June 6, 2007, and modified thereafter)

3.B.10 Emission Points AG-001 through AG-014, AI-001, AI-002, and AI-003 are considered inherent process equipment with respect to the Compliance Assurance Monitoring (CAM) regulations, 40 CFR Part 64. Therefore, the permittee shall not operate the delinting and lint transfer processes associated with these cyclones when the cyclones are inoperable. (Ref.: TVOP issued June 6, 2007, and modified thereafter)

3.B.11 Emission Points AJ-001 through AJ-005 are affected by and shall comply with the NESHAP for Solvent Extraction for Vegetable Oil Production (40 CFR 63, Subpart GGGG) and the General Provisions (40 CFR Part 63, Subpart A). (Ref.: 40 CFR 63, Subpart GGGG)

3.B.12 For Emission Points AJ-001 through AJ-005, the hexane vapors for the solvent plant (Emission Points AJ-001 through AJ-003) shall be condensed in the condenser. The hexane remaining in the exhaust gas from the condensers shall be controlled with a chilled mineral oil scrubbing system prior to being vented through the final vent (Emission Point AJ-004). (Ref.: PSD Permit to Construct issued on October 9, 1998, and TVOP issued on June 6, 2007, and modified thereafter)

3.B.13 For Emission Points AJ-001 through AJ-005, the permittee shall limit the number of gallons of HAP lost per ton of oilseed processed. The permittee shall not exceed a compliance ratio of 1.00. For each operating month after the compliance date (April 12, 2004), the permittee shall calculate a compliance ratio which compares actual HAP loss to allowable HAP loss for the previous 12 operating months (12-month rolling average). The compliance ratio shall be calculated using the following equation:

$$\text{Compliance Ratio} = \frac{\text{Actual Hap Loss}}{\text{Allowable Hap Loss}} \qquad (Eq.\ 1)$$

Equation 1 can also be expressed as a function of total solvent loss as shown in Equation 2:

$$\text{Compliance Ratio} = \frac{f * \text{Actual Solvent Loss}}{0.64 * \sum_{i=1}^{n}\left((\text{Oilseed})_i * (\text{SLF})_i\right)} \qquad (Eq.\ 2)$$

Where:

f = The weighted average volume fraction of HAP in solvent received during the previous 12 operating months, as determined in §63.2854, dimensionless.

0.64 = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless.

Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months, as determined in §63.2853.

Oilseed = Tons of each oilseed type "i" processed during the previous 12 operating months, as shown in §63.2855.

SLF = The corresponding solvent loss factor (gal/ton) for oilseed "i" listed in Table 1 of §63.2840 for *existing* sources. For Cottonseed, the factor will depend on amount processed in 12-operating month period (*Large (0.5)* or *Small (0.7)*).

The actual HAP loss shall be determined monthly based on the amount of hexane lost and the amount of seed processed. An operating month, as defined in §63.2872, is any calendar month in which a source processes a listed oilseed, excluding any entire calendar month in which the source operated under an initial startup period subject to §63.2850(c)(2) or (d)(2) or a malfunction period subject to §63.2850(e)(2).

(Ref.: 40 CFR 63.2840(a)-(d) and Table 1)

3.B.14 Emission Points AK-001 through AK-003 are subject to the Compliance Assurance Monitoring (CAM) Plan requirements in 40 CFR Part 64. A copy of the CAM Plan is attached as Appendix C. The emission points are subject to an emission limit or standard, use a control device to achieve compliance, and pre-control emissions for each emission point has the potential to exceed the Title V major source threshold of 100 tons per year of particulate matter. (Ref.: 40 CFR 64)

C. Insignificant and Trivial Activity Emission Limitations & Standards

Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
APC-S-1, Section 3.4(a)(1)	3.C.1	PM/PM_{10}	0.6 lbs/MMBTU, or as otherwise limited by facility modification restrictions
APC-S-1, Section 4.1(a)	3.C.2	SO_2	4.8 lbs/MMBTU, or as otherwise limited by facility modification restrictions
APC-S-1, Section 3.6(a)	3.C.3	PM/PM_{10}	$E=4.1(p)^{-0.667}$, or as otherwise limited by facility modification restrictions

3.C.1 The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input. (Ref.: APC-S-1, Section 3.4(a)(1))

3.C.2 The maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. (Ref.: APC-S-1, Section 4.1(a))

3.C.3 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission from any manufacturing process, in any one hour from any point source, particulate matter in total quantities in excess of the amount determined by the relationship:

$$E=4.1(p)^{-0.667}$$

Where E is the emission rate in pounds per hour and p is the process weight input rate in tons per hour. If the process weight input rate (p) changes, the emissions rate (E) will change accordingly. (Ref.: APC-S-1, Section 3.6(a))

SECTION 4. COMPLIANCE SCHEDULE

4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.

4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, by January 31 for the preceding calendar year. Each compliance certification shall include the following:

(a) the identification of each term or condition of the permit that is the basis of the certification;

(b) the compliance status;

(c) whether compliance was continuous or intermittent;

(d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;

(e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit. (Ref.: APC-S-6, Section III.C.5.a.,c.,&d.)

4.3 For Emission Points AA-001 and AA-002, the permittee is subject to and shall comply with all applicable requirements of the NESHAP for Major Source Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD. The permittee shall comply with the requirements of Subpart DDDDD by the compliance dates established in the final reconsidered rule. The emissions points are considered existing sources and must comply within three (3) years after publication of the final rule, unless further delayed by EPA.

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

A. General Monitoring, Recordkeeping and Reporting Requirements

5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.

5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:

(a) the date, place as defined in the permit, and time of sampling or measurements;
(b) the date(s) analyses were performed;
(c) the company or entity that performed the analyses;
(d) the analytical techniques or methods used;
(e) the results of such analyses; and
(f) the operating conditions existing at the time of sampling or measurement. (Ref.: APC-S-6, Section III.A.3.b.(1)(a)-(f))

5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (Ref.: APC-S-6, Section III.A.3.b.(2))

5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with APC-S-6, Section II.E. (Ref.: APC-S-6, Section III.A.3.c.(1))

5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) days of the time the deviation began. (Ref.: APC-S-6, Section III.A.3.c.(2))

5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the DEQ and the EPA.

5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Pollutant/ Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AA-001, AA-002	Fuel	Monitor and record monthly the fuel type, quantity, quality (for fuel oil), and heating value.	5.B.1	APC-S-6, Section III.A.3 and Title V Operating Permit (TVOP) issued June 6, 2007
AA-001, AA-002	Vary depending on fuel used	Monitoring, recordkeeping, and testing requirements.	5.B.2	40 CFR 63.7480-7575
Facility-Wide	Cottonseed Receiving Limit	Monitor and record daily the amount of cottonseed (or other oilseed, including soybeans) received. Use daily records to determine the amount of cottonseed received each month (tons per month) and for each consecutive 12-month period (tons per year).	5.B.3	PSD Construction Permit issued on October 9, 1998 and TVOP issued June 6, 2007
	Cottonseed Production Limit	Monitor and record daily the cottonseed (or other oilseed) production rate. Use daily records to determine the monthly (tons per month) and consecutive 12-month period (tons per year) production rate.	5.B.4	
AB-001, AB-002, AB-003, AB-005, AB-006	Hours of Operation	Monitor and record daily the amount of time required to unload the cottonseed, including soybeans, received and use to calculate the cottonseed receiving rate (tons per hour).	5.B.5	APC-S-6, Section III.A.3 and TVOP issued June 6, 2007
AB-006	Throughput	Monitor and record daily oilseed and returned meal throughput. Use daily records to determine the monthly (tons per month) and consecutive 12-month period (tons per year) throughput	5.B.6	APC-S-6, Section III.A.3 and TVOP issued June 6, 2007
AF-001 through AF-005, AG-001 through AG-014, AI-001 through AI-003, AJ-001 through AJ-003, AK-001 through AK-003	PM/PM_{10}	Conduct compliance stack testing. For process areas that utilize similar control equipment and handle identical process/waste streams, a representative percentage of the total units may be tested. All emission points (or representative emission points) shall be tested within 5 years of permit issuance, and every 5 years thereafter.	5.B.7	APC-S-6, Section III.A.3 and TVOP issued June 6, 2007
AF-001 through AF-005, AG-001 through AG-014, AI-001 through AI-003, AJ-001 through AJ-003, AK-001 through AK-003, AL-016	Control Equipment Inspections	Perform regular inspections of air emissions control equipment on a weekly basis, and maintain on hand sufficient equipment necessary to repair and/or replace the pollution control equipment.	5.B.8	APC-S-6, Section III.A.3 and TVOP issued June 6, 2007
AG-001 through AG-014, AI-001, AI-002, AI-003	Operation	Record all instances processes associated with these emission points are operated when the emission points are inoperable.	5.B.9	APC-S-6, Section III.A.3 and TVOP issued June 6, 2007
AJ-001 through AJ-005	Solvent (HAP) Loss &	Develop and implement a written plan for demonstrating compliance with 40 CFR 63,	5.B.10	40 CFR 63.2851

Emission Point(s)	Pollutant/ Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
	Oilseed Processed	Subpart GGGG.		
AJ-001 through AJ-005	SSM	Develop and implement a written SSM.	5.B.11	40 CFR 63.2852
AJ-001 through AJ-005	Solvent (HAP) Loss	Determine the monthly and 12-month rolling sum of solvent loss (gallons) and resulting compliance ratio.	5.B.12 5.B.13	40 CFR 63.2853
AJ-001 through AJ-005	Oilseed Processed	Determine the monthly and 12-month rolling quantity of oilseed processed (tons).	5.B.14 5.B.15	40 CFR 63.2855
AJ-001 through AJ-005	Solvent (HAP) Loss	Monitor and maintain monthly records of the total solvent (HAP) loss, regardless of facility operating status.	5.B.16	40 CFR 63.2862(c)(vi)
AJ-001 through AJ-005	Compliance Ratio	Determine the compliance ratio using the 12 month rolling total of solvent (HAP) loss and oilseed processed, and provide a statement of whether the facility is in compliance with the ratio and all other requirements of Subpart GGGG.	5.B.17	40 CFR 63.2862(d)(4) and (5)
AJ-001 through AJ-005	Operating Status	For each SSM event subject to an initial startup or malfunction period, record the description, date, duration, and reason it qualifies as an initial startup or malfunction; estimate the solvent loss (gallons) during the SSM event with supporting documentation; and provide a checklist or other mechanism to indicate the SSM plan was followed.	5.B.18	40 CFR 63.2862(e)
AK-001 through AK-003	Opacity Inspections	Conduct visible emissions observation daily. Conduct visual and maintenance inspections weekly.	5.B.19	APC-S-6, Section III.A.3 and TVOP issued June 6, 2007
Facility-Wide	Visible Emissions	Perform visible emission observations (e.g., EPA Ref. Method 22) for each non-fugitive emission point on a weekly basis. If during the visible emission observation any visible emissions are observed, the permittee shall perform an EPA Ref. Method 9 evaluation.	5.B.20	APC-S-6, Section III.A.3 and TVOP issued June 6, 2007

5.B.1 For Emission Points AA-001 and AA-002, the permittee shall monitor and maintain monthly records on the type, quantity, quality (sulfur content of fuel oil), and heating value (BTU/gal or BTU/ft^3) of the fuel(s) combusted.

5.B.2 Beginning within three (3) years after publication of the final rule, for Emission Points AA-001 and AA-002, the permittee shall comply with the requirements of 40 CFR 63, Subpart DDDDD. This subpart establishes performance testing, fuel analysis, operating limits, compliance demonstration methods, and reporting requirements, which are provided in Tables 5 through 9 of Subpart DDDDD. The permittee shall comply with all applicable monitoring, recordkeeping, testing, and reporting requirements of the Subpart.

The permittee shall maintain files on site of all measurements, monitoring, data, reports, and other information required by the Subpart DDDDD in accordance with Condition 5.A.3, and the records shall be made available upon request by MDEQ personnel. The permittee shall submit a summarized report in accordance with Condition 5.A.4. (Ref.: 40 CFR 63, Subpart DDDDD)

5.B.3 The permittee shall monitor and record daily the amount of cottonseed (or other oilseed, including soybeans) received. The daily records shall be used to determine the amount of cottonseed (or other oilseed) received each month (tons per month) and for each consecutive 12-month period (tons per year).

5.B.4 The permittee shall monitor and record daily the cottonseed (or other oilseed) production rate. Use daily records to determine the monthly (tons per month) and consecutive 12-month period (tons per year) production rate.

5.B.5 The permittee shall monitor and record daily the amount of time required to unload the cottonseed (or other oilseed) received. The permittee shall also calculate the average cottonseed (or other oilseed) receiving rate (tons per hour) daily using the total amount of seed received and the hours required to receive the seed.

5.B.6 For Emission Point AB-006, the permittee shall monitor and record the daily oilseed and returned meal throughput. Use daily records to determine the monthly (tons per month) and consecutive 12-month period (tons per year) throughput.

5.B.7 For Emission Points AF-001 through AF-005, AG-001 through AG-014, AI-001 through AI-003, AJ-001 through AJ-003, and AK-001 through AK-003, the permittee shall demonstrate compliance with the PM/PM_{10} emission limitations by stack testing in accordance with EPA Reference Methods 1-5. Compliance testing shall be performed under normal operating conditions and while operating at or near capacity. Stack testing shall be performed on a rotating basis with a frequency where all emission points are tested within five (5) years of permit issuance, and every five (5) years thereafter.

For process areas that utilize similar control equipment and handle identical process/waste streams, the permittee may stack test a representative percentage of the total units (e.g., not less than 20%). The permittee shall submit a pre-test protocol to be approved by the Mississippi Department of Environmental Quality (MDEQ) containing the intended test schedule for the permit term and any justifications for testing representative units.

The pre-test protocol should be submitted at least thirty (30) days prior to the proposed test date to ensure that all test methods and procedures are acceptable to the MDEQ. The permittee must notify the MDEQ prior to the scheduled test date(s). At least ten (10) days notice should be given so that an observer may be scheduled to witness the test(s). The results of the performance testing shall be submitted to the MDEQ within sixty (60) days of the stack test event.

5.B.8 For Emission Points AF-001 through AF-005, AG-001 through AG-014, AI-001

through AI-003, AJ-001 through AJ-004, AK-001 through AK-003, and AL-016, the permittee shall perform regular inspections of air emissions control equipment on a weekly basis. Such air emissions control equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants, and shall be operated at all times when the respective processes are in operation. The permittee shall also maintain on hand at all times sufficient equipment as is necessary to repair and/or replace the pollution control equipment.

5.B.9 For Emission Points AG-001 through AG-014, AI-001, AI-002, and AI-003, the permittee shall record all instances where processes associated with these emission points are operated when the emission points are inoperable.

5.B.10 For Emission Points AJ-001 through AJ-005, the solvent extraction process, the permittee shall develop and implement a written plan that provides the detailed procedures for monitoring and recording data necessary for demonstrating compliance with 40 CFR 63, Subpart GGGG. The permittee shall use one or more accurate measurement methods such as weigh scales, volumetric displacement, and/or material mass balances to quantify solvent loss and amount of cottonseed (or other oilseed) processed. The permittee shall develop and implement a site-specific plan for demonstrating compliance, and keep the plan on-site and readily available for review. If changes are made to the plan, the previous versions of the plan shall be maintained and also made available for inspection for at least five (5) years after each revision. The compliance plan must include the following items:

(a) The name and address of the permittee;

(b) The physical address of the vegetable oil production process;

(c) A detailed description of all methods of measurement used to determine solvent losses, HAP content of solvent, and the tons of each type of oilseed processed;

(d) When measurements are made;

(e) Examples of each calculation used to determine compliance status;

(f) Example logs of how data's recorded; and

(g) A plan to ensure that the data continues to meet compliance demonstration needs.

A copy of this compliance plan titled "Vegetable Oil MACT Compliance Plan" has been developed by the permittee and is provided in Appendix B.

(Ref.: 40 CFR 63.2851)

5.B.11 For Emission Points AJ-001 through AJ-005, the solvent extraction process, the permittee shall develop a written Startup, Shutdown, and Malfunction (SSM) plan in accordance with §63.6(e)(3) and implement the plan, when applicable. The SSM plan shall be maintained on-site and readily available for review. The SSM plan shall provide detailed procedures for operating and maintaining the source to minimize emissions during a qualifying SSM event for which the source chooses the §63.2850(e)(2) malfunction period, or the §63.2850(c)(2) or (d)(2) initial startup period.

The SSM plan must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the practices in use to minimize emissions. (Ref.: 40 CFR 63.2852)

5.B.12 For Emission Points AJ-001 through AJ-005, the solvent extraction process, the permittee shall determine the total solvent loss (gallons per month) by the end of each calendar month following an operating month. The total solvent loss for an operating month includes all solvent losses that occur during normal operating periods. The permittee shall also determine the previous consecutive 12-month rolling sum of actual solvent loss (in gallons). The 12-month rolling sum of solvent loss is the ``actual solvent (HAP) loss," which is used to calculate the compliance ratio listed in Section 3.B. (Ref.: 40 CFR 63.2853)

5.B.13 For Emission Points AJ-001 through AJ-005, the solvent extraction process, the permittee shall calculate the actual solvent (HAP) loss by using the procedures in the compliance plan (provided in Appendix B) to determine the following:

(a) Define the dates of each operating status period during a calendar month, which includes the beginning date of each calendar month and the date of any change in the source operating status. For example, if the permittee maintains the same operating status during an entire calendar month, these dates are the beginning and ending dates of the calendar month.

(b) Categorize the source operating status for each recorded time interval in accordance with Table 1 of §63.2853(a)(2), which includes a normal operating period, non-operating period, initial startup, malfunction, and exempt period.

(c) Measure and record the beginning and ending solvent inventory.

(d) Record the amount (gallons) of extraction solvent received in each shipment.

(e) Adjust the solvent inventory, as necessary to accurately estimate losses. Reasonable justification for the adjustment(s) shall be made.

For normal operating periods the following equation may be used to determine the actual solvent (HAP) loss within a calendar month:

$$\text{Solvent (HAP) Loss} = \sum_{i=1}^{n} (SOLV_B - SOLV_E + SOLV_R \pm SOLV_A)_i$$

where:

$SOLV_B$ = gallons of solvent in the inventory at the beginning of normal operating period ``i",

$SOLV_E$ = gallons of solvent in the inventory at the end of normal operating period,

$SOLV_R$ = gallons of solvent received between the beginning and ending inventory dates of normal operating period,

$SOLV_A$ = gallons of solvent added or removed from the extraction solvent inventory (adjustments) during normal operating period, and n = number of normal operating periods in a calendar month.

The actual solvent (HAP) loss is the total solvent losses during normal operating periods for the previous twelve (12) operating months. Therefore, determine the actual solvent (HAP) loss by summing the monthly actual solvent losses for the previous 12 operating months. The permittee shall record the actual solvent (HAP) loss by the end of each calendar month following an operating month, and the calculated actual solvent (HAP) loss shall be used to determine the compliance ratio. (Ref.: 40 CFR 63.2853)

5.B.14 For Emission Points AJ-001 through AJ-005, the solvent extraction process, the permittee shall determine all oilseed measurements on an as received basis. The "as received" basis refers to the oilseed chemical and physical characteristics as initially received and prior to any oilseed handling and processing. The permittee shall determine the tons of oilseed as received by the end of each calendar month following an operating month. The total oilseed processed for an operating month includes the total oilseed processed during all normal operating periods. The permittee shall also determine the previous consecutive 12-month rolling sum of oilseed processed, and is used to calculate the compliance ratio. (Ref.: 40 CFR 63.2855)

5.B.15 For Emission Points AJ-001 through AJ-005, the solvent extraction process, the permittee shall determine the tons "as received" of oilseed processed by using the procedures in the compliance plan (provided in Appendix B) to determine the following:

(a) Define the dates of each operating status period, which includes the beginning date of each calendar month and the date of any change in the source operating status. The dates on each oilseed inventory log shall be consistent with the dates recorded for the solvent inventory.

(b) Categorize the source operation status for each recorded time interval, which should be consistent with the operating status recorded on the solvent inventory.

(c) Measure and record the beginning and ending oilseed inventory.

(d) Record the type and tons of each oilseed shipment received.

(e) Adjust the oilseed inventory, as necessary to accurately estimate oilseed processed. Reasonable justification for the adjustment(s) shall be made. In some situations, determining the quantity of oilseed processed directly from the measured oilseed inventory and quantity of oilseed received is not an accurate estimate of the tons of oilseed processed for use in determining compliance ratios. Situations that may require oilseed inventory adjustments include, but are not limited to:

(1) Oilseed that mold or otherwise become unsuitable for processing;

(2) Oilseed sold before it is processed;

(3) Oilseed destroyed by an event such as a process malfunction, fire, or natural disaster;

(4) Oilseed processed through operations prior to solvent extraction such as screening, dehulling, cracking, drying, and conditioning; but that are not routed to the solvent extractor for further processing; and

(5) Periodic physical measurements of inventory. For example, periodically emptying oilseed storage silos to physically measure the current oilseed inventory may result in a small inventory correction.

For normal operating periods the following equation may be used to determine the quantity of each oilseed type processed within a calendar month:

$$\text{Oilseed Processed} = \sum_{i=1}^{n} (SEED_B - SEED_E + SEED_R \pm SEED_A)_i$$

where:

$SEED_B$ = tons of oilseed in the inventory at the beginning of normal operating period ``i'',

$SEED_E$ = tons of oilseed in the inventory at the end of normal operating period,

$SEED_R$ = tons of oilseed received between the beginning and ending inventory dates of normal operating period,

$SEED_A$ = tons of oilseed added or removed from the extraction oilseed inventory (adjustments) during normal operating period, and n = number of normal operating periods in a calendar month.

The quantity of each oilseed processed is the total tons of each type of listed oilseed processed during normal operating periods for the previous twelve (12) operating months. Therefore, determine the tons of each oilseed processed by summing the monthly quantity of each oilseed processed for the previous 12 operating months. The permittee shall record the quantity of each oilseed processed by the end of each calendar month following an operating month, and the calculated oilseed quantity shall be used to determine the compliance ratio. The quantity of oilseed processed does not include oilseed processed during non-operating periods, initial startup, malfunction periods, or exempt operation periods. (Ref.: 40 CFR 63.2855)

5.B.16 For Emission Points AJ-001 through AJ-005, the solvent extraction process, the permittee shall monitor and maintain monthly records and a 12-month rolling sum of the total solvent (HAP) loss, regardless of facility operating status. (Ref.: 40 CFR 63.2862(c)(vi))

5.B.17 For Emission Points AJ-001 through AJ-005, the solvent extraction process, the permittee shall determine the compliance ratio using the information obtained within this section and the equation(s) in Section 3.B., and provide a statement of whether the facility is in compliance with the ratio and all other requirements of Subpart GGGG. (Ref.: 40 CFR 63.2862(d)(4) and (5))

5.B.18 For Emission Points AJ-001 through AJ-005, the solvent extraction process, for each SSM event subject to an initial startup period or malfunction period, the permittee shall record the following items by the end of the calendar month following the month in which the initial startup or malfunction occurred:

(a) Provide a description, date, duration, and reason the event qualifies as an initial startup or malfunction;

(b) Estimate the solvent loss (gallons) during the event with supporting documentation; and

(c) Develop and provide a checklist or other mechanism to indicate if the SSM plan was followed.

(Ref.: 40 CFR 63.2862(e))

5.B.19 For Emission Points AK-001 through AK-003, the permittee shall perform daily visible emission observations (e.g., EPA Ref. Method 22) of the air pollution control equipment. If visible emissions are observed, the permittee will conduct a Visible Emissions Evaluation (VEE) consistent with EPA Reference Method 9. Records of observations and any maintenance work conducted shall be kept in log form and made available for review upon request.

For Emission Points AK-001 through AK-003, the permittee shall also perform weekly visual and maintenance inspections of the air pollution control equipment. Records of the inspections and any maintenance work conducted shall be kept in log form and made available for review upon request. This shall serve as the method of compliance with 40 CFR 64.3(a) and the permittee's specific Compliance Assurance Monitoring (CAM) Plan. A copy of this plan is attached as Appendix C. (Ref.: 40 CFR 64.3(a))

5.B.20 The permittee shall perform visible emission observations (similar to EPA Reference Method 22) for each non-fugitive emission point on a weekly basis. If during the visible emission observation any visible emissions are observed, the permittee shall perform a VEE consistent with EPA Reference Method 9. The permittee shall record the results of the visual observations and VEEs.

C. Specific Reporting Requirements

Emission Point(s)	Pollutant/ Parameter Monitored	Reporting Requirement	Condition Number
AA-001, AA-002	Fuel	Report the fuel type, quantity, quality (for fuel oil), and heating value on a semiannual basis.	5.C.1
AA-001, AA-002	Vary depending on fuel used	Report on monitoring requirements.	5.C.2
Facility-Wide	Cottonseed Receiving Limit	Report the amount of cottonseed (or other oilseed) received on a semiannual basis.	5.C.3
	Cottonseed Production Limit	Report the cottonseed (or other oilseed) production rate on a semiannual basis.	5.C.4
AB-001, AB-002, AB-003, AB-005, AB-006	Hours of Operation	Report the cottonseed (or other oilseed or returned meal) receiving rate on a semiannual basis.	5.C.5

Emission Point(s)	Pollutant/ Parameter Monitored	Reporting Requirement	Condition Number
AF-001 through AF-005, AG-001 through AG-014, AI-001 through AI-003, AJ-001 through AJ-003, AK-001 through AK-003	PM/PM_{10}	Submit a pre-test protocol at least 30 days prior to the test date to provide intended test schedule and any justifications for testing representative units. Notify the MDEQ at least 10 days prior to the test date so an observer may be scheduled to witness the test(s). Submit the results of the performance testing to the MDEQ within 60 days of the stack test event.	5.C.6
AF-001 through AF-005, AG-001 through AG-014, AI-001 through AI-003, AJ-001 through AJ-004, AK-001 through AK-003, AL-016	Control Equipment Operation	Report any time control equipment is not properly operating when the respective process is in operation.	5.C.7
AJ-001 through AJ-005	HAP Loss & Oilseed Processed	Report the monthly and 12-month rolling sum of solvent (HAP) loss and oilseed processed on a semiannual basis.	5.C.8
AJ-001 through AJ-005	Total HAP Loss	Report monthly and 12-month rolling total of total solvent (HAP) loss, regardless of facility operating status.	5.C.9
AJ-001 through AJ-005	Compliance Certification	Prepare and submit an Annual Compliance Certification.	5.C.10
AJ-001 through AJ-005	Deviation Notification	Prepare and submit a Deviation Notification Report as necessary.	5.C.11
AJ-001 through AJ-005	Periodic SSM Report	Prepare and submit a Periodic SSM Report when operating during an initial startup and malfunction period.	5.C.12
AJ-001 through AJ-005	Immediate SSM Report	Prepare and submit an Immediate SSM Report when handling SSM during initial startup or malfunction different than the SSM plan.	5.C.13
AK-001 through AK-003	CAM Requirements	Provide a summary report on the CAM Plan requirements on a semiannual basis.	5.C.14
Facility-Wide	Visible Emissions	Provide summary report of VEEs and any VEE that exceeds an opacity limit.	5.C.15

5.C.1 For Emission Points AA-001 and AA-002, the permittee shall prepare a summary report of the fuel(s) combusted, including type, quantity, quality (sulfur content of fuel oil), and heating value (BTU/gal or BTU/ft3), and submit the report in accordance with permit condition 5.A.4.

5.C.2 For Emission Points AA-001 and AA-002, the permittee shall maintain files on site of all measurements, monitoring, data, reports, and other information required by the Subpart DDDDD in accordance with Condition 5.A.3, and the records shall be made available upon request by MDEQ personnel. The permittee shall submit a summarized report in accordance with Condition 5.A.4. (Ref.: 40 CFR 63, Subpart DDDDD)

5.C.3 The permittee shall prepare a summary report of the amount of cottonseed (or other oilseed or returned meal) received each month (tons per month) and for each consecutive 12-month period (tons per year), and submit the report in accordance with permit condition 5.A.4.

5.C.4 The permittee shall prepare a summary report of the cottonseed (or other oilseed) monthly production rate (tons per month) and the total annual production rate for each consecutive 12-month period (tons per year), and submit the report in accordance with permit condition 5.A.4.

5.C.5 For Emission Points AB-001, AB-002, AB-003, AB-005, and AB-006, the permittee shall prepare a summary report of the calculated cottonseed (or other oilseed) receiving rate (in tons per hour and tons per year (for AB-006)), and submit the report in accordance with permit condition 5.A.4.

5.C.6 For Emission Points AF-001 through AF-005, AG-001 through AG-014, AI-001 through AI-003, AJ-001 through AJ-003, and AK-001 through AK-003, the permittee shall submit a pre-test protocol to be approved by the MDEQ containing the intended test schedule and any justifications for testing representative units.

The pre-test protocol should be submitted at least thirty (30) days prior to the proposed test date to ensure that all test methods and procedures are acceptable to the MDEQ. The permittee must notify the MDEQ prior to the scheduled test date(s). At least ten (10) days notice should be given so that an observer may be scheduled to witness the test(s). The results of the performance testing shall be submitted to the MDEQ within sixty (60) days of the stack test event.

5.C.7 For Emission Points AF-001 through AF-005, AG-001 through AG-014, AI-001 through AI-003, AJ-001 through AJ-004, AK-001 through AK-003, and AL-016, the permittee shall submit a summary report in accordance with 5.A.4 detailing anytime control equipment is not properly operating when the respective process is in operation. The report should at least note the date, malfunction start and end time, cause (or root cause), and corrective actions of such occurrences.

5.C.8 For Emission Points AJ-001 through AJ-005, the permittee shall determine the monthly and 12-month rolling sum of solvent (HAP) loss and oilseed processed in accordance with Section 5.B, and submit a summary report in accordance with permit condition 5.A.4.

5.C.9 For Emission Points AJ-001 through AJ-005, the permittee shall determine the monthly and 12-month rolling sum of total solvent (HAP) loss regardless of facility operating status, and submit a summary report in accordance with permit condition 5.A.4.

5.C.10 For Emission Points AJ-001 through AJ-005, the permittee shall prepare an Annual Compliance Certification to be submitted with the Title V Annual Certification of Compliance (Permit Condition 4.2). The Annual Compliance Certification must contain the following information:

(a) Name and address of the permittee;

(b) Physical address of the vegetable oil production process;

(c) Each listed oilseed type processed during the 12-month period covered by the report

(d) Each HAP identified under §63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12-month period covered by the report;

(e) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source;

(f) A compliance certification to indicate whether the source was in compliance with each compliance determination made during the 12-month reporting period. For each such compliance determination, the permittee shall include a certification of the following items:

(1) The procedures described in the plan for demonstrating compliance were followed; and

(2) The compliance ratio is less than or equal to 1.00.

(Ref.: 40 CFR 63.2861(a))

5.C.11 For Emission Points AJ-001 through AJ-005, the permittee shall submit a Deviation Notification Report for each compliance determination made in which the compliance ratio exceeds 1.00. The Deviation Notification Report shall be submitted in accordance with 5.A.5 and shall contain the following information:

(a) Name and address of the permittee;

(b) Physical address of the vegetable oil production process;

(c) Each listed oilseed type processed during the 12-month period for which the deviation is determined; and

(d) The compliance ratio comprising the deviation.

(Ref.: 40 CFR 63.2861(b)).

5.C.12 For Emission Points AJ-001 through AJ-005, if the permittee chooses to operate during initial startup or malfunction periods, the permittee shall submit a periodic startup, shutdown, and malfunction (SSM) report. The Periodic SSM Report shall contain the following information:

(a) Name, title, and signature of the responsible official who is certifying that the report accurately states that all actions taken during the initial startup or malfunction period were consistent with the SSM plan;

(b) Description of events occurring during the time period, the date and duration of the events, and reason the time interval qualifies as an initial startup period or malfunction period; and

(c) Estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.

(Ref.: 40 CFR 63.2861(c))

5.C.13 For Emission Points AJ-001 through AJ-005, if the permittee handles a SSM during an initial startup or malfunction period differently from procedures in the SSM plan, the

permittee shall submit an immediate SSM report. The Immediate SSM Report shall consist of a telephone call or facsimile to the MDEQ within two (2) working days after starting actions inconsistent with the SSM plan. Within seven (7) days after the end of the event, the permittee shall submit a letter containing the following:

(a) Name, title, and signature of the responsible official who is certifying accuracy of the report, an explanation of the event, and the reasons for not following the SSM plan;

(b) Description and date of the SSM event, its duration, and reason it qualifies as a SSM; and

(c) Estimate of the solvent loss for the duration of the SSM event with supporting documentation.

(Ref.: 40 CFR 63.2861(d))

5.C.14 For Emission Points AK-001 through AK-003, the permittee shall prepare a summary report of the CAM Plan requirements, and submit the report in accordance with permit condition 5.A.4.

5.C.15 The permittee shall prepare a summary report of the visual observations requiring a visible emissions evaluation (VEE), conducted in accordance with EPA Ref. Method 9, and submit the report in accordance with permit condition 5.A.4. In addition, the permittee shall report any VEE that exceeds an opacity limit in accordance with Permit Condition 5.A.5

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

None permitted.

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at **http://ecfr.gpoaccess.gov** under Title 40, or DEQ shall provide a copy upon request from the permittee.

7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A – Production and Consumption Controls.

7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B – Servicing of Motor Vehicle Air Conditioners.

7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E – The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:

(a) All containers in which a class I or class II substance is stored or transported;

(b) All products containing a class I substance; and

(c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.

7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F – Recycling and Emissions Reduction:

(a) Servicing, maintaining, or repairing appliances;

(b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or

(c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any

acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G – Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.

7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H – Halon Emissions Reduction:

(a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;

(b) Any person disposing of halons;

(c) Manufacturers of halon blends; or

(d) Organizations that employ technicians who service halon-containing equipment.

APPENDIX A

LIST OF ABBREVIATIONS USED IN THIS PERMIT

APPENDIX A

List of Abbreviations Used In this Permit

APC-S-1	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
APC-S-2	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
APC-S-3	Regulations for the Prevention of Air Pollution Emergency Episodes
APC-S-4	Ambient Air Quality Standards
APC-S-5	Regulations for the Prevention of Significant Deterioration of Air Quality
APC-S-6	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
APC-S-7	Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act
BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
lbs/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards For Hazardous Air Pollutants, 40 CFR 61 or National Emission Standards For Hazardous Air Pollutants for Source Categories, 40 CFR 63
NMVOC	Non-Methane Volatile Organic Compounds
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10 Fm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound

APPENDIX B

VEGETABLE OIL MACT COMPLIANCE PLAN

(per 40 CFR 63, Subpart GGGG)

ATTACHMENT 3

VEGETABLE OIL MACT COMPLIANCE PLAN

Approved by: Billy Breedlove
Revision Date: July 18, 2005

VEGETABLE OIL MACT COMPLIANCE PLAN
PYCO INDUSTRIES, INC. ▪ GREENWOOD, MISSISSIPPI

Prepared by:

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July 2005

Project 052101.0011

Trinity Consultants

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1. INTRODUCTION

PYCO Industries, Inc. (PYCO) operates a cottonseed oil extraction plant in Greenwood, Mississippi (Greenwood facility). Because potential emissions of n-hexane from the facility are greater than 10 tons per year, the Greenwood facility is considered a major source of hazardous air pollutants (HAP). As a major source of HAP, the Greenwood facility is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Solvent Extraction for Vegetable Oil Production, detailed in Title 40, Part 63, Subpart GGGG of the Code of Federal Regulations (40 CFR 63 Subpart GGGG). Typically, NESHAP regulations are also referred to as Maximum Achievable Control Technology (MACT) standards.

The Greenwood facility is considered an existing source by definition, since it was constructed prior to May 26, 2000, and has not undergone any reconstruction or significant modification since that date. Existing sources must be in compliance with the requirements of 40 CFR 63 Subpart GGGG no later than three (3) years after the effective date of the subpart. The effective date of the standard is April 12, 2001. Therefore, the compliance date for the Greenwood facility is April 12, 2004.

In accordance with 40 CFR §63.2851, PYCO has developed this written plan for demonstrating compliance (Vegetable Oil MACT Compliance Plan or "compliance plan") that outlines the detailed procedures PYCO will follow to monitor and record data necessary for demonstrating compliance with 40 CFR 63 Subpart GGGG.

The startup, shutdown, and malfunction (SSM) plan is contained in a separate document.

2. Action Items & Responsible Personnel

2.1 ACTION ITEMS

The following table addresses the critical action items associated with the MACT rule.

Item	Date Due	Discussion
Rule compliance date.	4/12/2004	Begin keeping all required records and following Compliance Plan and SSM Plan.
40 CFR §63.2860(a) Initial notification for existing sources.	8/10/2001	Submitted on 7/31/2001
40 CFR §63.2860(c) Significant modification notifications.	30 days prior to startup after modification	Only applicable if there is a significant modification to the cottonseed oil plant.
40 CFR §63.2860(d) Notification of compliance status.	5/29/2005, or within 60 days following 12 operating months, whichever is later	Initial annual report containing information for initial 12 operating months of data. Submitted on 5/2/2005.
40 CFR §63.2861(a) Annual compliance certifications.	Within 12 calendar months following the notification of compliance status & within 12 calendar months after each previous annual compliance certification.	Annual report containing information for 12 calendar months of data.
SSM Plan requirements		See separate SSM document.

2.2 RESPONSIBLE PERSONNEL

The following table addresses which personnel are responsible for collecting the necessary data and compiling the notifications and reports.

Item	Responsible Personnel	Discussion
Tasks associated with process recordkeeping and compliance determination spreadsheet.		
Maintain the compliance determination log spreadsheet.	Environmental Manager	Will gather all necessary data from various sources and compile this data for the previous month by the end of each month.
Measure the cottonseed inventory.	Office Manager	Will measure and record cottonseed inventory at least on the beginning and ending dates of each normal operating period.
Determine the monthly cottonseed received.	Office Manager	Will keep inventory of all cottonseed shipments made to plant.
Determine cottonseed inventory adjustments.	Office Manager	Will keep records on adjustments to cottonseed inventory (from mold, periodic inventory reconciliation adjustments, cottonseed sold, etc.)
Measure the solvent inventory.	Solvent Plant Leadman	Will measure and record solvent inventory in the solvent storage tanks at least on the beginning and ending dates of each normal operating period.
Keep records on received solvent shipments.	Office Manager	Will keep records on volume of each shipment and the MSDS or certificate of analysis (shows HAP content) of each shipment.
Determine solvent inventory adjustments.	Office Manager	Will keep records on adjustments to solvent inventory (from change in extraction plant equipment volume, periodic inventory reconciliation adjustments, etc.)
Tasks associated with reports and notifications.		
Submit notification of compliance status.	Environmental Manager	Submitted on 5/2/2005.
Submit annual compliance certifications.	Environmental Manager	Will submit reports using provided template within 12 calendar months following the notification of compliance status & within 12 calendar months after each previous annual compliance certification.
Submit deviation notification reports.	Environmental Manager	Only submitted in the event that compliance ratio > 1.00 for any 12 operating month period.
SSM Plan requirements		See separate SSM document.

NESHAP SUBPART GGGG DOCUMENTS PYCO Industries, Inc. Greenwood, Mississippi, Facility Compliance Plan	
Affected Source:	**Vegetable Oil Extraction Process**

Approved by: Billy Breedlove
Revision Date: July 18, 2005

1. Purpose

In accordance with 40 CFR §63.2851, PYCO Industries, Inc. (PYCO) has developed a written plan for demonstrating compliance (Vegetable Oil MACT Compliance Plan or "compliance plan") that outlines the detailed procedures PYCO will follow to monitor and record data necessary for demonstrating compliance with 40 CFR 63 Subpart GGGG.

This compliance plan will be incorporated by reference into PYCO's Title V permit, and PYCO maintains the plan on-site and readily available for inspection or reference. Copies (electronic or hardcopy) of all previous versions of the plan over the most recent 5 years are maintained. The compliance plan includes all of the items outlined in 40 CFR §63.2851(a)(1) through (7) as listed below:

(1) The name and address of the owner or operator.

PYCO Industries, Inc.
P.O. Box 1320
Greenwood, MS 38930

(2) The physical address of the vegetable oil production process.

PYCO Industries, Inc.
2015 West River Road
Greenwood, MS 38930

(3) A detailed description of all methods of measurement the source will use to determine solvent losses, HAP content of solvent, and the tons of each type of oilseed processed.

See Section 2 of this plan.

(4) When each measurement will be made.

See Section 2 of this plan.

(5) Examples of each calculation used to determine the plant's compliance status, including examples of how measured data is converted.

See Section 4 of this plan.

(6) Example logs of how data will be recorded.

The example recording forms and monthly data logs are contained in Appendix B.

(7) A plan to ensure that data continues to meet compliance demonstration needs.

This document contains the procedures that are followed to ensure data meets the compliance demonstration needs.

1.1. Compliance Plan Organization

To ease future updates and recordkeeping requirements, this compliance plan is organized as follows:

Section 2: *Monitoring and Recordkeeping Procedures* – This section provides an overview of the monitoring and recordkeeping procedures used to track solvent loss, cottonseed throughput, and overall compliance ratios.

Section 3: *Reporting Procedures* – This section presents a summary of reports required to be submitted in accordance with 40 CFR 63 Subpart GGGG.

Section 4: *Example Calculations* – This section shows sample calculations in support of Section 2.

2. Monitoring and Recordkeeping Procedures

The Vegetable Oil MACT limits the number of gallons of HAP lost per ton of cottonseed processed. For each operating month, a compliance ratio must be calculated, which compares actual HAP loss to the allowable HAP loss for the previous 12 operating month period, according to the equation shown below. A compliance ratio must be calculated each month unless the entire month is made up of an initial startup period, a malfunction period, and/or a non-operating period.

$$Compliance\ Ratio = \frac{f * Actual\ Solvent\ Loss}{0.64 * Cottonseed\ * SLF}$$

Where:

f = The weighted average volume fraction of HAP in solvent received during the previous 12 operating months, dimensionless.

0.64 = The average volume fraction of HAP from baseline solvent data, dimensionless.

Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months

Cottonseed = Tons of cottonseed processed during the previous 12 operating months.

SLF = Allowable solvent loss factor (gal/ton) for conventional cottonseed processing from Table 1 of 40 CFR §63.2840. If 120,000 tons or more of cottonseed is processed in a 12-month operating period, the SLF is equal to 0.5. If less than 120,000 tons of cottonseed is processed in a 12-month operating period, the SLF is equal to 0.7.

After 12 operating months following the compliance date of April 12, 2004, the facility must calculate a rolling 12 operating month compliance ratio. After the initial 12-month compliance ratio is calculated, PYCO must continue to calculate a new rolling 12-month compliance ratio by the end of each calendar month following an operating month.

When calculating the compliance ratio, the following conditions need to be considered [from 40 CFR §63.2840(b)]:

- If the source processes any cottonseed in a calendar month and is not operating under an initial startup period or a malfunction period, then the month is considered an operating month.
- The 12-month compliance ratio may include operating months occurring prior to a source shutdown and operating months that follow after the source resumes operation.
- If the source shuts down and processes no cottonseed for an entire calendar month, then the month is considered a non-operating month, which can be excluded from the compliance ratio determination.
- If the source is subject to an initial startup period, PYCO may exclude from the compliance ratio determination any solvent and cottonseed throughput information recorded during that period.
- If the source is subject to a malfunction period, as defined in 40 CFR §63.2872, PYCO may exclude from the compliance ratio determination any solvent and cottonseed information recorded for the malfunction period.

If the rolling 12-month compliance ratio is less than or equal to 1.00 for a given operating month, the plant was in compliance with the HAP emission requirements for that month. A majority of the monitoring and recordkeeping requirements of the Vegetable Oil MACT are related to data needed for calculating the rolling 12-month compliance ratio, as discussed in the following sections.

2.1. Actual Solvent Loss

By the end of each calendar month following an operating month, the total solvent loss in gallons for the previous operating month must be determined. The total solvent loss for an operating month includes all solvent losses that occur during normal operating periods within the operating month. After 12 or more operating months have occurred after the April 12, 2004, compliance date, the rolling 12-month actual solvent loss in gallons must be determined by summing the monthly actual solvent loss for the previous 12 months. The 12 operating months rolling sum of solvent loss is the "actual solvent loss," which is used to calculate the compliance ratio.

The plant determines actual solvent loss by monitoring and recording the five items from 40 CFR §63.2853 listed below:

(1) The dates that define each operating status period during a calendar month.

The dates that define each operating status period during a calendar month include the beginning date of each calendar month and the date of any change in operating status. If the same operating status is maintained during an entire calendar month, these dates are the beginning and ending dates of the calendar month.

(2) Source operating status.

The operating status for each recorded time interval is categorized as one of four different modes:

- Normal operating period – not one of the three below
- Non-operating period – no cottonseed is being processed
- Malfunction period – extraction area is operating in accordance with the SSMP
- Initial startup period – extraction area is operating following a significant modification and prior to a normal operating period

(3) Measuring the beginning and ending solvent inventory.

The solvent inventory is measured and recorded at least on the beginning and ending dates of each normal operating period that occurs during each calendar month. The levels of the solvent in the storage and work tanks are manually measured using a dipping device.

(4) Gallons of extraction solvent received.

The total gallons of extraction solvent received in each shipment is recorded.

(5) Solvent inventory adjustments.

There is no existing emissions control equipment at the facility that destroys HAP. Any process changes resulting in a change in the solvent working capacity of the equipment will be properly accounted for and duly noted.

After collecting the items discussed above, the equation below is used to determine the actual solvent loss occurring from the extraction process for all normal operating periods recorded within a calendar month.

$$Monthly\ Actual\ Solvent\ (gal) = \sum_{i=1}^{n} (SOLV_B - SOLV_E + SOLV_R \pm SOLV_A)$$

Where:

$SOLV_B$ = Gallons of solvent in the inventory at the beginning of normal operating period "i".
$SOLV_E$ = Gallons of solvent in the inventory at the end of normal operating period "i".
$SOLV_R$ = Gallons of solvent received between the beginning and ending inventory dates of normal operating period "i".
$SOLV_A$ = Gallons of solvent added or removed from the extraction solvent inventory during normal operating period "i".
n = Number of normal operating periods in a calendar month.

Losses that occur during the four operating status periods listed below are not included when calculating actual solvent loss. If any one of these four operating status periods spans an entire month, then the month is treated as non-operating and no compliance ratio is determined.

1. Non-operating periods
2. Initial startup periods
3. Malfunction periods
4. Exempt operation periods (i.e., periods when the source does not process a listed oilseed from 40 CFR 63 Subpart GGGG).

2.2. *Weighted Average Volume Fraction of HAP in Solvent*

This section describes the information and procedures that PYCO uses to determine the weighted average volume fraction of HAP in extraction solvent received for use in their extraction area. The weighted average volume fraction of HAP in extraction solvent is determined at the end of each calendar month. After 12 operating months following the compliance date of April 12, 2004, PYCO will also determine an overall weighted average volume fraction of HAP in solvent received for the previous 12 operating months, which will be used to determine the compliance ratio.

For each solvent shipment received, PYCO records the volume fraction of each HAP comprising more than 1 percent by volume of the solvent, based on a material safety data sheet (MSDS) or a manufacturer's certificate of analysis (COA).[1] A COA is a legal and binding document provided by the solvent manufacturer. The purpose of a COA is to list the test methods and analytical results that determine chemical properties of the solvent and the volume percentage of all HAP components present in the solvent at quantities greater than 1 percent by volume.[2]

The weighted average volume fraction of HAP in the extraction solvent for each operating month and on a rolling 12-month basis is determined and recorded, regardless of the operating status during the month, using the equation shown below.

$$\textit{Weighted Average HAP Content} = \frac{\sum_{i=1}^{n}(\textit{Received}_i * \textit{Content}_i)}{\textit{Total Received}}$$

Where:

$Received_i$ = Gallons of extraction solvent received in delivery "i."

$Content_i$ = Volume fraction of HAP in extraction solvent delivery "i" according to the MSDS or COA.

Total Received = Total gallons of extraction solvent received since the end of the previous operating month.

n = Number of extraction solvent deliveries in a particular calendar month or rolling twelve calendar month period.

2.3. *Quantity of Cottonseed Processed*

Cottonseed inventory is determined on an *as received* basis, as required by the rule. The as received amount of cottonseed processed is determined from the amount of cottonseed oil produced and the oil

[1] PYCO may elect to record the volume fraction of HAP less than 1 percent by volume of solvent in each delivery, but is not required to do so per the requirements of 40 CFR 63 Subpart GGGG.

[2] PYCO understands that the Administrator may require a test using EPA Method 311 to confirm the reported HAP content on the certificates of analysis. If the results of any required analysis are different from the reported content, the EPA Method 311 results will govern compliance determinations.

content of the seed. Periodic cottonseed inventory adjustments are made by estimating the amount of cottonseed in storage. After 12 operating months following the compliance date of April 12, 2004, the tons of cottonseed processed on a rolling 12-month basis, which is used to calculate the compliance ratio, will also be determined.

The quantity of cottonseed processed is determined by monitoring and recording the five items from 40 CFR §63.2855 listed below:

(1) The dates that define each operating status period during a calendar month.

The dates that define each operating status period during a calendar month include the beginning date of each calendar month and the date of any change in operating status. If the same operating status is maintained during an entire calendar month, these dates are the beginning and ending dates of the calendar month.

(2) Source operating status.

The operating status for each recorded time interval is categorized as one of four different modes:

- Normal operating period – not one of the three below
- Non-operating period – no cottonseed is being processed
- Malfunction period – extraction area is operating in accordance with the SSMP
- Initial startup period – extraction area is operating following a significant modification and prior to a normal operating period

(3) Measuring the beginning and ending inventory for each oilseed.

The cottonseed inventory is measured and recorded at least on the beginning and ending dates of each normal operating period that occurs during each calendar month.

(4) Tons of cottonseed received.

The amount (in tons) of cottonseed in each shipment received is weighed on a scale and recorded.

(5) Cottonseed inventory adjustments.

In some situations, determining the quantity of cottonseed processed directly from the measured cottonseed inventory and quantity of cottonseed received is not an accurate estimate of the tons of cottonseed processed for use in determining compliance ratios. For example, spoiled and molded cottonseed removed from storage, but not processed will result in an overestimate of the quantity of cottonseed processed. In such cases, the cottonseed inventory is adjusted and justification for the adjustment is documented. Situations that may require cottonseed inventory adjustments include, but are not limited to, the situations listed below:

- Cottonseed that develops mold or otherwise becomes unsuitable for processing.
- Cottonseed that is sold before entering the processing operation.
- Cottonseed destroyed by an event, such as a process malfunction, fire, or natural disaster.
- Cottonseed processed through operations prior to solvent extraction, but that are not routed to the solvent extractor for further processing.
- Periodic physical measurements of inventory. For example, periodically, cottonseed storage houses are emptied to physically measure the current cottonseed inventory. This periodic measurement procedure typically results in a small inventory correction. The correction factor, usually less than 1 percent, is used to adjust the cottonseed inventory.

After collecting the items discussed previously, the equation below is used to determine the quantity of cottonseed processed during normal operating periods recorded within a calendar month.

$$Monthly\ Quantity\ of\ Cottonseed\ Processed\ (tons) = \sum_{i=1}^{n}(SEED_B - SEED_E + SEED_R \pm SEED_A)$$

Where:

$SEED_B$ = Tons of seed in the inventory at the beginning of normal operating period "i".
$SEED_E$ = Tons of seed in the inventory at the end of normal operating period "i".
$SEED_R$ = Tons of seed received during normal operating period "i".
$SEED_A$ = Tons of seed added or removed from the seed inventory during normal operating period "i".
n = Number of normal operating periods in the calendar month (typically only one).

The quantity of cottonseed processed does not include losses that occur during the four operating status periods listed below. If any one of these four operating status periods spans an entire month, then the month is treated as non-operating and there is no compliance ratio determination.

1. Non-operating periods
2. Initial startup periods
3. Malfunction periods
4. Exempt operation periods

3. Reporting Procedures

3.1. Notifications

This section discusses the one-time notifications that PYCO has submitted (or will submit) to the responsible agency.

Initial notification. The first notification that was due for existing sources was the "Initial Notification". An initial notification was due at the agency responsible for governing the Vegetable Oil MACT no later than 120 days after the effective date of 40 CFR 63 Subpart GGGG (i.e., by August 10, 2001). The initial notification for the Greenwood facility was submitted on July 31, 2001.

Reconstruction notification. If, in the future, the extraction area of the plant is modified to the point that the modification would be considered a reconstruction project, numerous additional notifications would be required before, during, and after construction begins on the project, per the schedule listed in the General Provisions of 40 CFR 63 Subpart A (40 CFR §63.9), with a few exceptions listed in 40 CFR 63 Subpart GGGG. Since this kind of modification is not anticipated for the Greenwood facility, the specific requirements are not discussed further. However, if such a project were to occur, PYCO will submit the applicable notifications according to the schedule in 40 CFR §63.9.

Significant modification notifications. If, in the future, the extraction area is modified in such a way that the modification would be considered a significant modification (but not a reconstruction project), two additional notifications would be required during the course of the project. These notifications are discussed in detail in 40 CFR §63.2860(c).

Notification of compliance status. As an existing major source that is subject to the Vegetable Oil MACT, PYCO is required to submit a notification of compliance status (NCS) report to the MDEQ no later than 60 days after determining the initial 12 operating month compliance ratio for the facility (i.e., by May 29, 2005). This notification is discussed in detail in 40 CFR §63.2860(d) and was submitted by the Greenwood facility on May 2, 2005.

3.2. Annual Compliance Certifications

The first annual compliance certification is due 12 calendar months after the notification of compliance status is submitted. Each subsequent annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar month period ending 60 days prior to the date on which the report is due and should include the items discussed in detail in 40 CFR §63.2861(a). A copy of each annual compliance certification is maintained as required for a period of 5 years.

3.3. Deviation Notification

At any time, if the compliance ratio for an operating month exceeds 1.00 for the rolling 12 operating month period, a deviation notification report must be submitted by the end of the calendar month following the operating month in which the deviation was determined. The deviation notification report must include the items discussed in detail in 40 CFR §63.2861(b).

3.4. Periodic and Immediate SSM Reports

Periodic and immediate startup, shutdown, and malfunction reports must be submitted. All reporting requirements associated with initial startups and malfunctions are discussed in a separate SSMP document. Therefore, these two types of reports are not discussed further in this document.

4. Example Calculations

This section presents a discussion of example calculations. Note that the data included in this section is for example purposes only and does not represent actual data collected from the facility.

4.1. Actual Solvent Loss

A sample calculation is included for a normal operating period defined as the entire calendar month, beginning on the first day of the month and ending on the last day. Solvent records are generally maintained in units of gallons. If solvent is recorded in pounds, the density of the solvent will be used to

convert the pounds recorded to gallons for use in the calculations (i.e., pounds of solvent divided by the solvent density).

The beginning solvent inventory is 15,000 gallons, and the ending solvent inventory for the period is 18,500 gallons of solvent. The gallons of solvent received during the calendar month are 10,000 gallons. There are no adjustments made by the facility for this operating period. The monthly actual solvent loss, measured in gallons, is calculated as follows:

$$\text{Monthly Actual Solvent (gal)} = \sum_{i}^{n}(SOLV_B - SOLV_E + SOLV_R \pm SOLV_A)$$
$$= (15{,}000 - 18{,}500 + 10{,}000)$$
$$= 6{,}500$$

The actual solvent loss for the 12-month rolling period is calculated by summing the previous 12-month individual actual solvent losses. For demonstration purposes, for the calculation of the compliance ratio in Section 4.4, assume the calculated 12-month solvent total ending on the last day of this sample month is 80,000 gallons.

4.2. Weighted Average Volume Fraction

Two extraction solvent deliveries occurred during the last calendar month. According to the MSDS from the manufacturer, the first delivery of extraction solvent received (5,000 gallons, n-hexane based) contained 0.64 volume fraction of HAP. The second delivery of extraction solvent (5,000 gallons, iso-hexane based) contained 0.03 volume fraction of HAP. The facility is not required to record the volume fraction of HAP in a solvent received if it is less than 1 percent by volume (0.01 volume fraction). Therefore, the monthly weighted average HAP content may be calculated as follows in this situation:

$$\textit{Monthly Weighted Average HAP Content} = \frac{\sum_{i=1}^{n}(\text{Received}_i \times \text{Content}_i)}{\text{Total Received}}$$
$$= \frac{(5{,}000 \times 0.64) + (5{,}000 \times 0.03)}{10{,}000}$$
$$= 0.335$$

The weighted average HAP content for the 12-month rolling period is calculated using the same methodology. For demonstration purposes, for the calculation of the compliance ratio in Section 4.4, assume the calculated 12-month weighted average HAP content for the period ending on the last day of this sample month is 0.335.

4.3. Quantity of Oilseed Processed

The normal operating period for the facility is defined as the entire calendar month, beginning on the first day of the month and ending on the last day. Cottonseed records are generally maintained in units of tons.

The beginning cottonseed inventory is 675 tons, and the ending cottonseed inventory for the operating period is 835 tons. During the month, approximately 1,225 tons of cottonseed were received. Based on a physical measurement of the cottonseed inventory during the calendar month, the monthly processed total is adjusted for a reduction of one percent of the total amount received.

The monthly quantity of cottonseed processed is calculated as follows:

$$\text{Monthly Quantity of Cottonseed processed (tons)} = \sum_1^n (SEED_D - SEED_B + SEED_R \pm SEED_A)$$
$$= (675 - 835 + 1{,}225 - 122.5)$$
$$= 942.5$$

The quantity of cottonseed processed for the 12-month rolling period is calculated by summing the previous 12 monthly calculations. For demonstration purposes, for the calculation of the compliance ratio in Section 4.4, assume the calculated 12-month quantity of cottonseed processed for the period ending on the last day of this sample month is 150,000 tons.

4.4. Compliance Ratio

The compliance ratio for this 12-month period ending at the end of this sample month can be calculated, since an initial startup period or malfunction period did not occur during the entire month. The compliance ratio is calculated using the following equation:

$$\text{Compliance Ratio} = \frac{f \times \text{Actual Solvent Loss}}{0.64 \times \text{Cottonseed} \times \text{SLF}}$$
$$= \frac{0.335 \times 80{,}000}{0.64 \times 150{,}000 \times 0.5}$$
$$= 0.56$$

The compliance ratio is less than 1.00, which means the facility was in compliance with the HAP emission requirement for the previous 12-operating month period.

APPENDIX C

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

Delta Oil Mill Compliance Assurance Monitoring Plan – Greenwood Facility

AK-001 through AK-003/ Outr-A-Vac Drum Filters	Indicator No. 1	Indicator No. 2
I. Indicator Measurement Approach	Visible Emissions	Inspection and Maintenance Program
	Visible emissions observations using U.S. EPA Test Method 22 shall be made and recorded in accordance with the requirements specified in 40 CFR § 64.7(c). Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded.	The inspection and maintenance program includes a weekly inspection of the drum filters for certain parameters using a checklist to ensure proper operation.
II. Indicator Range	If visible emissions are observed, the permit holder shall report a deviation within five (5) days of the time the deviation began. As an alternative, the permit holder may determine the opacity, consistent with U.S. EPA Test Method 9, as soon as practicable but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the results of the opacity observation will be compared to the equivalent opacity standard of 40% opacity provided in the Mississippi Air Emission Regulations for the Prevention, opacity Abatement, and Control of Air Contaminants (APC-S-1), Section 3.2. If the result of Test Method 9 is an opacity above 40% the permit holder shall report a deviation. In addition, all deviations shall be reported in the semi-annual report.	Filter media and other equipment shall meet the manufacturer's specifications based on the inspection. An excursion is defined as failure to meet these criteria. Excursions trigger corrective action, which may include replacement of filters or repair of equipment. Records shall be kept of each inspection and the corrective action taken. An excursion will be reported as a deviation within five (5) days of the time the deviation began. The report shall include the probable cause of the deviation, and any corrective actions or preventive measures taken. In addition, all deviations shall be reported in the semi-annual report.

III. Performance Criteria	Visible Emissions	Inspection and Maintenance Program
A. Data Representiveness	The visible emissions observation shall be made at the emissions outlet. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.	The drum filters are inspected for deterioration and filter media is checked periodically for damage. Other maintenance may include proper lubrication and adjustment of equipment.
B. Verification of Operational Status	N/A	Records will be kept of the control device inspections and maintenance program.
C. QA/QC Practices and Criteria	The visible emissions observer shall be trained per Method 22. The opacity observer shall be trained and certified per Method 9.	Trained personnel perform inspections and maintenance.
D. Monitoring Frequency	Method 22 readings shall be recorded once per day of operation.	Control device inspections are performed once per week.
E. Data Collection Procedures	Results of Method 22 and/or Method 9 observations shall be recorded in a log located at the facility.	Results of the inspections and maintenance activities shall be recorded in the maintenance log.
F. Averaging Period	N/A	N/A