#### RESPONSE TO COMMENTS

## Riceland Foods, Inc. – Soy Division DRAFT PERMIT #0908-AOP-R3 AFIN: 01-00008

On December 13, 2010, the Director of the Arkansas Department of Environmental Quality gave notice of a draft permitting decision for the above referenced facility. During the comment period the Department received comments, data, views or arguments on the draft permitting decision. The Department's response to these issues follows.

#### Issue #1:

## Under the current permit #0908-AOP-R2:

SN-04 is receiving pits #4 and #5 (Scalperator & Baghouse), the facility has a daily limit of 3,300 tons of grain per day (SC#6), however the current permit does not list the overall emissions in PC#8. Assuming that SN-01 & SN-2 are the Receiving pits (uncaptured emissions) which is included!

The minor mod letter (9-28-10) shows no SN-04 source in the letter in referencing SC#6. It only references SN-110 and SN-111. The condition states:

The permittee shall demonstrate compliance with this condition by Specific Condition 6, Plantwide Condition, and max. equipment operating capacities. No correlation between sources. Please explain?? So will receiving Pit #4 have a daily throughput or not?

#### Response #1:

The R3 permit will retain the daily throughput limit for SN-04. Additionally, the annual emissions from SN-04 have been included with the overall emissions bubble for all receiving sources covered by Plantwide Condition # 8.

#### Issue #2:

Should the recordkeeping of SC # 9 include a reference to General Provision # 7?

#### Response #2:

The permit has been updated to include a reference to General Provision # 7.



February 2, 2011

Neil Washburn Director of Environmental Compliance Riceland Foods, Inc. - Soy Division P.O .Box 927 Stuttgart, AR 72160

Dear Mr. Washburn:

The enclosed Permit No. 0908-AOP-R3 is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your application initially received on 9/15/2010.

After considering the facts and requirements of A.C.A. §8-4-101 et seq., and implementing regulations, I have determined that Permit No. 0908-AOP-R3 for the construction, operation and maintenance of an air pollution control system for Riceland Foods, Inc. - Soy Division to be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, Regulation 8, within thirty (30) days after service of this decision.

The applicant or permittee and any other person submitting public comments on the record may request an adjudicatory hearing and Commission review of the final permitting decisions as provided under Chapter Six of Regulation No. 8, Administrative Procedures, Arkansas Pollution Control and Ecology Commission. Such a request shall be in the form and manner required by Regulation 8.603, including filing a written Request for Hearing with the APC&E Commission Secretary at 101 E. Capitol Ave., Suite 205, Little Rock, Arkansas 72201. If you have any questions about filing the request, please call the Commission at 501-682-7890.

Sincerely,

Mike Bates

Chief, Air Division

# ADEQ OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation 26:

Permit No.: 0908-AOP-R3

IS ISSUED TO:

Riceland Foods, Inc. - Soy Division Hwy 79 and Park Ave Stuttgart, AR 72160 Arkansas County AFIN: 01-00008

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

February 14, 2008

AND

February 13, 2013

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Mike Bates

Chief, Air Division

February 2, 2011

Date

AFIN: 01-00008

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# List of Acronyms and Abbreviations

A.C.A. Arkansas Code Annotated

AFIN ADEQ Facility Identification Number

CFR Code of Federal Regulations

CO Carbon Monoxide

HAP Hazardous Air Pollutant

lb/hr Pound Per Hour

MVAC Motor Vehicle Air Conditioner

No. Number

NO<sub>x</sub> Nitrogen Oxide

PM Particulate Matter

PM<sub>10</sub> Particulate Matter Smaller Than Ten Microns

SNAP Significant New Alternatives Program (SNAP)

SO<sub>2</sub> Sulfur Dioxide

SSM Startup, Shutdown, and Malfunction Plan

Tpy Tons Per Year

UTM Universal Transverse Mercator

VOC Volatile Organic Compound

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#### SECTION I: FACILITY INFORMATION

PERMITTEE: Riceland Foods, Inc. - Soy Division

AFIN: 01-00008

PERMIT NUMBER: 0908-AOP-R3

FACILITY ADDRESS: Hwy 79 and Park Ave

Stuttgart, AR 72160

MAILING ADDRESS: P.O .Box 927

Stuttgart, AR 72160

COUNTY: Arkansas County

CONTACT NAME: Neil Washburn

CONTACT POSITION: Director of Environmental Compliance

TELEPHONE NUMBER: 870-673-5337

REVIEWING ENGINEER: Joseph Hurt

UTM North South (Y): Zone 15: 3819905.62 m

UTM East West (X): Zone 15: 634167.92 m

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#### SECTION II: INTRODUCTION

## Summary of Permit Activity

Riceland Foods, Inc. (Riceland) owns and operates a large agricultural products storage and manufacturing complex in Stuttgart that consists of a soybean oil manufacturing plant, rice bran oil manufacturing plant, edible oil refinery, as well as grain receiving, storage, and drying facilities. The facility also includes a rice hull thermal energy conversion system (TECS), which gasifies rice hulls and combusts the resulting biogas in boilers to produce both steam and electricity.

This permit allows the facility to install a new dust system at the Unit 4 grain elevator facility (SN-110 & SN-111), install a new cooling tower (SN-112), and modify the vent of SN-83. This permit also removes the Receiving Pit # 4 Aspiration Multiclone (SN-06), Pits # 4 and # 5 Trash Tank Truck Loading (SN-11), and the Cogen Cooling Tower (SN-105). The total permitted emission decreases include 3.1 tpy of PM and 4.3 tpy of PM<sub>10</sub>.

## **Process Description**

## **Dryer Complex**

The dryer complex handles rice, soybeans, and wheat. The complex consists of two (2) units. One unit is referred to as the "West End" and other unit is designated as the "Annex".

The West End receives rice, soybeans, and wheat at Receiving Pit #4 (SN-01) and Receiving Pit #5 (SN-02). Aspirator emissions from SN-01 are controlled by Receiving Pit # 4 Baghouse (SN-110). Aspirator emissions from SN-02 are controlled by a multiclone (SN-07). The receipts are scalped and aspirated (controlled by a baghouse, SN-04) and then placed in bins based on grain type, moisture content, and grade. The receipts are transported from the bins to the driers and are dried using three (3) dryers: the Small Shanzer Dryer (SN-15), Amarillo Dryer #1 (SN-76), and Amarillo Dryer #2 (SN-77). The driers combust natural gas and are equipped with mesh screens to control particulate. The dried rice is stored until it can be sent to Riceland's Stuttgart Rice Mill. The soybeans are temporarily stored until they can be sent to the Soybean Terminal by conveyor. Wheat processed at the West End is stored until truck loadout (SN-14).

The Annex receives rice and soybeans at Receiving Pit #6 (SN-03). The receipts are scalped and aspirated (SN-09 baghouse which also controls Pit #6 Aspirator emissions) and then placed in bins for storage. Rice is transported from the bins to be dried at the Large Shanzer Dryer (SN-16). Soybeans are not dried at this drier. The grains are then transported to bins for storage until loadout.

A rice hull storage building is designated SN-108. The building consists of a concrete floor with 10 foot stem walls. A Cover-All building is constructed on top of the 10 foot walls. The building is 100 feet wide, 500 feet long and approximately 50 feet tall at the peak. It has vent

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fans for removing exhaust fumes from the front end loader and for controlling moisture in the building.

All grain movement at the Dryer Complex is accomplished through the use of belt conveyors, screw conveyors, drag conveyors, and elevator legs. Emissions due to internal handling are controlled by baghouses (SN-05 and SN-10). Equipment such as receiving pits, grain dryers, and grain cleaners have dedicated dust collection systems and are routed to trash tanks, some with bin vents (SN-12 and SN-13) and for loadout and disposal into trucks (SN-12B and SN-13B).

Operations also include a rice recovery operation between rice hull storage and the TECs unit feed. The operation consists of a rice hull receiver (SN-106), a Kice aspirator, a rice storage bin with a bin vent filter (SN-107A), and a pneumatic conveying system to transfer rice from the aspirator to the storage bin. The rice hull receiver is a bagfilter. The bagfilter and fan, rated at 28,500 cfm supply air to the aspirator for rice and hull separation. Recovered rice is loaded (SN-107B) into trucks and taken to the rice mill.

The Unit 4 trash tank (SN-111) receives the material collected by SN-110. The materials collected by SN-110 include emissions from SN-04, SN-05, SN-07, SN-76, and SN-77.

### Terminal and Blending

The Blending Elevators (SN-25, 26, 27, 31, 32, 33 and 35) at the Soy Division is used to receive soybeans from the Terminal Elevators. These beans are transported from the Terminal to the Blending Elevator via a belt conveyor. The Terminal elevator receives both rail and truck pits (SN-17, 97B) with baghouse (SN-19 and 98) for additional control. The Blending Elevator also receives soybeans hauled by bulk transport trucks (SN-18) that are unloaded in the elevator dump pit.

After the beans are received, they are stored according to their type, grade, and/or moisture content. The different grades of soybeans are cleaned, and/or blended in this elevator to achieve the desired quality of beans before sending them to Preparation to begin processing.

The equipment used in the Blending and Terminal Elevators is simply grain moving, handling, and cleaning equipment such as belt and drag conveyors, cup elevators, scalperators, and scales. There is also a dryer (SN-90) and dryer hull loadout (SN-91) associated with the unit. Emissions due to internal handling in the Terminal are controlled by a series of baghouses (SN-20) and captured particulate is routed to a trash tank for loadout and disposal (SN-21, 21A, 36 and 36B). Mill run bins (SN-22 and 23) loadout to trucks (SN-22B, 23B) or directly to trucks from the terminal (SN-24).

## Soybean Preparation

Raw soybeans are conveyed from storage on a belt conveyor which discharges into an in-process scale hopper. The scale hopper discharges batch-wise into a gyratory screener and aspirator

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(SN-89) (bean cleaner), which separates oversize material. The oversize material is aspirated both from the top surface of the screener and as it is discharged into the oversize outlet on the side of the machine. The oversized material is aspirated into cyclones where it is separated from the air stream and discharged through rotary valves into the top tray of the hull toaster.

The beans are then sent to the hot dehulling process. The bean heater is the first stage in the dehulling process. In this process, the beans are heated from ambient temperature to bring moisture to the surface of the beans. The heated air is routed to a cyclone (SN-83) and recovered particulates are returned to the heated beans for drying. The bean heater is then vented to the atmosphere from the cyclone. The heated beans are then passed through the jet dryer. This elevates the surface temperature of the beans, releasing the bond adhering the hull to the meat and driving off moisture. The air from the drying process passes through a cyclone to remove fines and loose hulls and the air is recirculated through the jet dryer.

The hulloosenator splits the soybeans in half along the naturally existing bean division and rolls the soybean hulls off the soybean meats. This separation is accomplished without the creation of fines. The split soybeans and loose hulls fall from the hulloosenator into the top of the aspirator. The split beans cascade downward through a countercurrent stream of air. The loosened hulls are aspirated out of the top of the aspirator into a cyclone (SN-37) and sent directly to grinding or toasting with no further separation needed.

The cracking rolls fracture the beans into an appropriate size for flaking. The cracked meats and remaining hulls drop into the conditioner. The meats cascade downwards, exiting at the base of the machine conditioned to the proper temperature and moisture content for flaking. Hulls and fines are separated in a cyclone for further screening and the air is recirculated.

The hull screener separates the product aspirated from the conditioner. Large hulls are sent to hull toasting and grinding (SN-39); small hulls/small meats and fines are sent to the germ separation Rotex machines. In the Rotex, soybean germ is separated from the fines and overs and are pneumatically conveyed to a Germ Receiver (SN-88) located at the meal warehouse. The Rotex machines have a nuisance dust system (SN-92). All overs and fines are sent to the Gravity Separator system (SN-94). The gravity separator separates the small hulls from the small meats. The small hulls are sent to grinding or toasting, while the small meats are sent to the flaking rolls.

Conditioned beans discharge from the bottom of the bean conditioner into a leg which feeds the flaking mill feed screw. This screw conveyor discharges into six flaking mills which press the bean meats into flakes. The flakes fall out of the mills into a drag conveyor which moves them toward the extraction plant. A percentage of the flakes are routed to the expander and then through the Collet Dryer/Cooler. The Flaking system and Dryer/Cooler are each controlled by a cyclone (SN-38) and baghouse (SN-86), respectively, and recovered particulates are returned to the process. Excess bean meats which do not feed into the flaking mill are conveyed into an overflow bin which feeds a screw conveyor returning them to the bean conditioner.

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#### Extraction

Soybean flakes are conveyed to the plant in an inclined drag conveyor. This conveyor discharges into a short plug screw conveyor which feeds the extractor. As the flakes are conveyed through the extractor, oil is removed with a series of hexane washes. Each hexane stream has a different but fairly constant concentration of oil. The most concentrated hexane stream is called the full miscella and is pumped to the distillation section of the plant for oil separation and solvent recovery.

The fully extracted soybean flakes drop out of the extractor into a vapor-tight inclined drag conveyor. This conveyor discharges into a short plug screw conveyor which feeds the desolventizer-toaster-dryer-cooler (DTDC) vessel. This vessel consists of several trays in a vertical arrangement. The flakes are held up through a gate that opens and shuts to hold a constant level on each tray. On the upper trays, the flakes are heated indirectly with steam that is inside the steam chest of the tray. This drives the volatile hexane solvent and some of the moisture out of the flakes and into the large overhead vapor line. These trays comprise the desolventizing section of the vessel.

The next trays, or toaster section, also heat the flakes with indirect steam and serve to remove residual hexane, dry the flakes further, and kill any urease activity that remains on the flakes. These are followed by a sparge tray which distributes live steam into the vessel. The steam passes through holes in the upper trays and helps to heat the flakes to evaporate hexane and water.

The following trays are the drying section of the vessel. Air is blown into the chest of these trays with an external fan and exits through holes that distribute air through the meal. By this time the flakes are broken up through drying and handling and the product can be termed meal. Depending on ambient conditions, air is sometimes heated with steam coils before it enters the trays. The air exits the trays into three cyclones (SN-40), one on each stage of the drying process, which remove meal dust and suspended particulates before the air is discharged into the atmosphere.

The final tray serves to cool the meal before it is discharged from the vessel. Part of the air from the fan is diverted into the cooling tray. This air is not heated and it discharges into a cyclone before exiting into the atmosphere. The dried and cooled meal is conveyed back to the bean preparation building where it is ground before being conveyed to storage.

The full miscella is pumped into the tube side of the first stage evaporator. The first stage evaporator is a vertical shell and tube heat exchanger. The shell side heat source is the vapor stream from the overhead of the DTDC. The hexane vapors that are boiled off in the tube side of this evaporator go to the evaporator condenser where the hexane is condensed with cooling water and recovered. The shell side vapors that are not condensed in the first evaporator pass into the vapor contactor where they are partially condensed with a stream of direct contact hexane. Residual vapors from this vessel pass into the DT. The concentrated liquid miscella from the first stage evaporator is preheated with product oil in a heat exchanger before being fed to the

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second stage evaporator. This evaporator uses steam as its heat source. The overhead vapors from this evaporator are also condensed in the evaporator condenser. This miscella that leaves this evaporator is pumped to the oil stripper.

The oil stripper is a distillation column with disc and doughnut internal distributors. The column operates under a high vacuum and removes the remaining hexane from the oil with live steam stripping. The overhead vapors are condensed in the stripper condenser and recovered. The pure crude oil is pumped from the bottom of this column through a heat exchanger to be cooled and then transferred to the storage tanks (SN-59).

Vapors from the DT condenser, work tank, solvent water separator, wastewater reboiler, extractor column, and mineral oil stripper are all routed to the vent condenser where they are cooled and condensed with cooling water.

Non-condensable and residual hexane from the DT condenser flows to the mineral oil absorber where hexane is absorbed into the mineral oil. The mineral oil is heated and pumped to the mineral oil stripper where the hexane is stripped back out of the mineral oil with live steam. The steam and hexane vapors are routed to the vent condenser for recovery. The small amount of gas that exits the mineral oil absorber is vented to the atmosphere (SN-41). This stream is primarily air containing approximately 2% hexane. Fugitive emissions of hexane are accounted for in SN-42.

#### Meal Handling

Soybean meal is a product of the grinding process and is stored in two locations (flat storage and meal storage). The meal that is routed from the grinding process directly to flat storage is carried by drag conveyors to an elevator. The meal is elevated to a drag conveyor on top of the meal storage facility. This conveyor also fills bins in meal storage and has a spout to feed flat storage. Meal coming to flat storage can be either stored or routed directly to trucks for loadout (SN-46) or rail for loadout (SN-48).

Meal storage has a bag filter to minimize dust from the conveyors and elevators (SN-43 and 44). Flat storage has a bag filter (SN-45) to minimize emission from the conveyor, elevator, and truck loadout.

Bentonite, stored in a tank (SN-75), is used in the meal handling operations to improve the flow characteristics and prevent the meal from sticking.

#### Rice Bran Oil Extraction

The Bran Oil Extraction Plant takes stabilized bran pellets received from the bran plants and extracts the oil. This crude oil is then sent to the Riceland Foods, Inc. refinery for processing into the final product.

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The stabilized bran is delivered to the extraction plant by truck (SN-53). The trucks dump into the receiving pit and the bran is conveyed to the stabilized bran bins. The bran bins are outfitted with a bin vent filter (SN-54) to control particulate emissions that are generated during the bin filling operation. From the storage bin the bran will be transferred to the oil extractor.

The extraction process produces hexane vapors, bran oil and solvent soaked (solventized) bran. The bran oil is collected and sent to the refinery for further processing, the hexane vapors are condensed and the hexane is reused in the extraction process, and the solventized bran is transferred to a DTDC for further processing.

The solventized bran enters the DTDC where both steam and hot air are used to volatize the excess solvent. The steam stage of the DTDC produces hexane vapors that are collected and condensed and the hexane is reused in the extraction process. The hot air stage of the DTDC produces emission of bran particulate and hexane vapors (SN-55). Three high efficiency cyclones are used to control the particulates generated from this process, but the hexane emissions are uncontrolled. Upon leaving the DTDC, the bran is dry and is oil and solvent free. This is known as defatted bran.

The defatted bran is sent to a hammermill. Nuisance dust from the hammermill and surge hopper is controlled by a baghouse (SN-95). The bran is then conveyed to the defatted bran bin where it is stored until it can be loaded out for reuse in the by-products plant at the Stuttgart Rice Mill. The defatted bran bin has a bin vent (SN-58) to control emissions generated during the bin filling process.

Hexane vapors generated from the extractor and the DTDC are sent to the vapor condenser that generates liquid hexane and return it to the hexane storage tanks (SN-60, 61). Fugitive emissions of hexane are accounted for in SN-57.

Vapors from the condenser that do not become liquefied enter the Bran Mineral Oil Scrubber (SN-56). This system uses mineral oil to capture as much remaining solvent as possible. The mineral oil system also vents uncontrolled hexane vapors to the atmosphere.

#### Refinery

The refinery at the Soya Division receives various vegetable oils (i.e., soybean, rice, bran, cottonseed, corn, canola, sunflower, peanut, etc.) from outside delivery and from within the Soya Division itself.

Phosphoric acid is added to the oil to begin processing. The oil is then heated and caustic is added. The oil and caustic are mixed in retention mixers. This mixture is heated in the refinery heaters and the oil is centrifuged. Raw soap stock is drawn off, caustic is added for saponification, and the soap stock is sent to storage. From storage, sulfuric acid is added in the acidulator. Acidulated soap stock is then stored.

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The refined oil is sent through a wash water heater and then to the scale tanks. The free fatty acid content of the oil is then checked. Oil that meets specification is sent on to the bleaching department and to storage. Rejected oil is reprocessed.

From storage, the refined oil is processed in the converter. The converter hydrogenates the oil, as necessary. The oil is then further cleaned, filtered, and refined to its final product. Due to extremely low vapor pressure of the oils, emissions are insignificant.

Permitted sources include the Bleaching Clay Tank (SN-70) and the Bleaching Clay Receiver Filter (SN-71).

#### Wastewater Treatment

Wastewater sources are Riceland's downtown Parboil plant, Soy Division boiler blowdown, refinery, and the Rice Bran Oil and Soybean Oil Extraction Plants. Emissions from the wastewater treatment system are negligible. However, the Lime Tank Bin Vent (SN-74) does emit minimal particulate emissions.

#### Lecithin Plant

Crude oil lecithin is received at the lecithin plant by truck. The crude lecithin is then fed to the extractors. Acetone is the solvent used in the extraction process. Acetone is stored in two 10,000 Gallon Acetone Tanks, SN-64 and 65.

Crude oil rises to the top and the bottoms contain a slurry of phosphotides and oil. The bottoms are pumped to the slurry tank for further separation. The slurry is routed to a filter drum, under vacuum, where a cake is pulled onto cloth. This cloth is then dried and scraped off to recover lecithin. The cake passes through a chute and on to the granulator.

The granules are then placed on a dryer bed. The dryer bed consists of two heating sections and conditioned air. Acetone vapors are pulled out of the dryer. Screw conveyors and air carry the dry material to the rotex. The rotex separates the lecithin granules into the grades of powder, granules, and large. Each grade is drummed, sold, and shipped out by truck.

The acetone vapors are routed to the VIC system (SN-68). The VIC consists of three carbon vessels. Two are always absorbing while the third is under a steam cycle. The three rotate on this cycle. Condensed acetone is recirculated to the feed tank.

The overhead crude oil from the extractor is sent to the settling tank. This is then sent to the evaporator. The first stage of the evaporator removes approximately 90% of the acetone. This acetone is then sent back to the rework tank. The second stage removes the remainder of the acetone. Oil in the system is sent to an outside tank and on to the refinery. An in-line bag filter minimizes granule carry over from the dryer bed to the VIC system. Fugitive emissions from the Lecithin plant are accounted for in SN-72.

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#### Boilers and Heaters

Riceland currently employs the use of two boilers to generate steam for various processes throughout the soybean mill. Boiler #3 (SN-49) at 67 MMBTU/hr and Boiler #4 (SN-50) at 100 MMBTU/hr are natural gas fired with no supplemental firing of fuel oil.

In the refinery, three heaters are used for Dowtherm heating and recirculation. The #3 Deodorizer Dowtherm Boiler (SN-51) at 8.8 MMBTU/hr, the #4 Deodorizer Dowtherm Boiler (SN-52) at 8.8 MMBTU/hr, and the Deodorizer Boiler (SN-96) at 14.423 MMBTU/hr are natural gas fired. Dowtherm is also lost as fugitive emissions from the process equipment (SN-66).

The Riceland facility also contains a gas plant that has a natural gas fired Reformer Furnace (SN-69) at 15 MMBTU/hr. This furnace is used for the generation of hydrogen gas, which is used in the refinery.

#### **TECS**

Rice hulls are delivered to the facility by hopper trucks that are unloaded into a receiving hopper (SN-79). The receiving hopper is equipped with screw conveyors that deliver the hulls to a bucket elevator. The elevator discharges the hulls to another screw conveyor which then discharges the hulls into one of two storage tanks (SN-80). Each storage tank is equipped with a variable rate bin discharger that delivers hulls to a second bucket elevator that conveys hulls to the gasifier metering bin.

The receiving hopper will be located in a drive-through type shed to minimize fugitive emissions from the unloading process and prevent rain from entering the hull conveying system.

The gasification system includes the hull metering bin, a rice hull gasifier, and the instrumentation and controls required to control the gasification process.

The metering bin provides the surge capacity necessary to compensate for variations between the delivery and gasification rates and is equipped with three (3) variable speed screw conveyors. The screw conveyors deliver hulls to the gasification unit in response to the output of the plant master controller.

The gasifier has three separate gasification units that convert the hulls to pyrolysis gas and ash. The hulls are converted to pyrolysis gas by the controlled application of air through the gasification unit grate as the hulls are agitated in the fuel bed maintained on the grate. Air is provided by the gasification air fan through a system of ducts and control dampers to the undergrate air plenum on each unit. Each gasification unit is a refractory lined, vertical steel chamber, sized to provide the residence time required to complete the gasification process and minimize the quantity of particulate matter carried over with the pyrolysis gas. Ash is discharged from the bottom of each gasification unit into water-cooled screw conveyors that cool the ash and transport it to a pneumatic conveying system that is part of the ash conveying and storage system. Pyrolysis gas is discharged from the top of the gasification units to the

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combustion system. The entire gasification/combustion unit is designated as SN-87 and is equipped with a fabric filter.

The ash conveying and storage system includes drag and screw conveying systems that receive ash from the cooling conveyor discharge on the three gasification units and transport it to the ash storage tank (SN-81). The storage tank is equipped with a pneumatic receiver that discharges ash to the storage tank and exhausts conveying air to a common header that directs the air through a fabric filter to control particulate emissions from the conveying system. The storage tank is designed for unloading into trucks (SN-82) that transport the ash to off-site utilization or disposal facilities.

The truck loading area is enclosed in a drive-through type shed that is designed to minimize fugitive emissions from the truck loading operations.

#### Ash Plant

Rice hull ash is transferred from the TECS ash tank by drag conveyor to the ash plant. The ash is then either loaded into 800 pound totes or is sent to a bagger for producing 10 kg bags. There is a nuisance dust system with a baghouse for the ash conveyors (SN-93). The bagger has a dedicated dust control system (SN-99).

## **Cooling Towers**

The facility operates six cooling towers throughout facility (SN-100 – SN-104 and SN-112).

## Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective June 18, 2010
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective July 18, 2009
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective January 25, 2009
40 CFR 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial- Institutional Steam Generating Units
40 CFR 60, Subpart DD – Standards of Performance for Grain Elevators
40 CFR 63, Subpart GGGG - National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production for the soybean extraction process
40 CFR Part 82, Protection of Stratospheric Ozone

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# **Emission Summary**

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

TI V	EMISSIO	N SUMMARY		
Source	Description	Pollutant	Emissio	n Rates
Number	_		lb/hr	tpy
		PM	107.4	347.2
		PM <sub>10</sub>	50.1	165.7
т	atal Allamahla Emissions	SO <sub>2</sub>	40.3	174.7
10	otal Allowable Emissions	VOC	222.4	972.2
		CO	49.3	214.1
		NO <sub>X</sub>	106.7	466.1
	HAPs	n-Hexane*	134.87	593.20
	HAPS	Biphenyl*	0.10	0.30
	Air Contaminants **	Acetone	98.40	430.90
0.1	Receiving Pit #4 (Uncaptured	PM	0.3	1.81
01	Emissions)	$PM_{10}$	0.1	$0.4^{1}$
	Receiving Pit #5 (Uncaptured	PM	0.3	1.81
02	Emissions)	$PM_{10}$	0.1	$0.4^{1}$
	Receiving Pit #6 (Uncaptured	PM	0.3	1.81
03	Emissions)	$PM_{10}$	0.1	$0.4^{1}$
0.4	Receiving Pits #4 and #5	PM	0.4	1.3
04	Scalperator and Baghouse	$PM_{10}$	0.1	0.4
	Upper Nuisance Dust		0.5	0.4
05	Collection System and	PM PM	0.5	0.4 0.2
	Baghouse	$PM_{10}$	0.3	0.2
07	Receiving Pit #5 Aspiration	PM	0.3	0.2
07	Multiclone	PM <sub>10</sub>	0.1	0.1
09	Receiving Pit #6 Aspiration	PM	0.3	1.1
	and Scalperator and Baghouse	PM <sub>10</sub>	0.1	0.3
	Upper and Lower Nuisance	PM	0.2	0.4
10	Dust Collection System and	$PM_{10}$	0.2	0.7
	Baghouse	1 14110	0.2	0.2
12	Pit #6 Trash Tank w/ filter &	PM	0.1	0.1
&	Pit #6 Trash Tank Truck Load	$PM_{10}$	0.1	0.1
12B	out	10	J.,	J.1
13	Annex Trash Tank w/ filter &	DM 4	0.1	0.1
&	Annex Trash Tank Truck	PM DM	0.1	0.1
13B	Load out	$PM_{10}$	0.1	0.1

	EMISSIC	N SUMMARY		
Source	Description	Pollutant	Emissio	n Rates
Number			lb/hr	tpy
14	Storage Truck Loadout	. PM	1.5	6.3
17	Storage Truck Loadout	$PM_{10}$	0.5	2.2
		PM	1.0	22.5 <sup>2</sup>
		$PM_{10}$	0.4	$6.0^{2}$
15	Small Shanzer Dryer	$SO_2$	0.3	1.0
1.5	Sman Shanzer Dryer	VOC	0.1	0.4
		CO	1.3	5.5
		$NO_x$	1.5	6.5
		PM	1.6	22.9 <sup>2</sup>
		$PM_{10}$	0.6	$6.4^{2}$
1.6	Large Shanzer Dryer	$SO_2$	0.4	1.7
16		VOC	0.2	0.6
		CO	2.1	9.1
		$NO_x$	2.5	10.8
17	Terminal End Receiving	PM	1.0	1.81
17	(Uncaptured Emissions)	$PM_{10}$	0.2	$0.4^{1}$
1.0		PM	0.7	1.81
18	Blending End Receiving	$PM_{10}$	0.2	0.41
10	Terminal Truck Dust System	PM	0.1	0.1
19	Bagfilter	$PM_{10}$	0.1	0.1
20	Baghouse at Terminal	PM	1.7	1.9
20	Basement	$PM_{10}$	1.0	1.1
21	Terminal Trash Tank Bin Vent	_		
&.	Filter & Terminal Trash Tank	PM	0.1	0.1
21B	Loadout	$PM_{10}$	0.1	0.1
		***************************************	<u> </u>	
22	Mill Run (Bin 521) Bagfilter	PM	0.8	3.2
& 22D	& Mill Run (Bin 521) Truck	$PM_{10}$	0.3	1.1
22B	Loadout			
23	Mill Run (Bin 519) Bagfilter			
&	& Mill Run (Bin 519) Truck	PM	0.8	3.2
23B	Loadout	$PM_{10}$	0.3	1.1
		PM	0.9	3.8
24	Terminal Truck Loadout	$PM_{10}$	0.3	1.3
25	Blending Elevator - System	PM	0.6	1.9
25	A1 Baghouse	$PM_{10}$	0.4	1.1
26	Blending Elevator - System	PM	0.6	1.9
26	A2 Baghouse	$PM_{10}$	0.4	1.1

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	EMISSIO	N SUMMARY		
Source	Description	Pollutant	Emissic	n Rates
Number			lb/hr	tpy
27	Blending Elevator - System	PM	0.6	1.9
27	B1 Baghouse	$PM_{10}$	0.4	1.1
2.1	Blending Elevator - System	PM	0.1	0.1
31	D1 Baghouse	$PM_{10}$	0.1	0.1
22	Blending Elevator - System	PM	0.6	1.9
32	D2 Baghouse	$PM_{10}$	0.4	1.1
22	Blending Elevator - System	PM	0.6	1.9
33	E1 Baghouse	$PM_{10}$	0.4	1.1
2.5	Blending Elevator - System F	PM	0.6	1.9
35	Baghouse	$PM_{10}$	0.4	1.1
36	Blending Elevator Trash Tank		0.1	
&	& Blending Elevator Trash	PM	0.1	0.1
36B	Tank Loadout	$PM_{10}$	0.1	0.1
27	U-4 D-1-11 C-4 C-1	PM	1.1	4.6
37	Hot Dehull System Cyclone	$PM_{10}$	1.1	4.6
20	F1-1-1 - P-11- C1	PM	8.3	36.0
38	Flaking Roller Cyclone	$PM_{10}$	2.1	9.0
20	Mari Cainding Dock	PM	0.8	3.4
39	Meal Grinding Baghouse	$PM_{10}$	0.8	3.4
		PM	0.5	1.8
40	Meal Dryer Cooler Cyclones	$PM_{10}$	0.5	1.8
40	(3 total)	VOC	11.3	49.5
		n-Hexane	7.23	3
41	Soybean Solvent Extraction	VOC	34.9	152.9
41	Mineral Oil Stripper	n-Hexane	22.3	3
40	Soybean Solvent Extraction	VOC	89.2	390.9
42	Fugitive Losses	n-Hexane	57.1	3
42	Meal Storage Receiver	PM	0.1	0.5
43	Baghouse	$PM_{10}$	0.1	0.5
4.4	Meal Storage to Flat	PM	0.1	0.5
44	Storage/Loadout	$PM_{10}$	0.1	0.5
15		PM	0.1	0.5
45	Meal to Flat Storage/Loadout	$PM_{10}$	0.1	0.5
4.0	Mad Day Care Dat	PM	0.2	0.9
46 	Meal Dust System Baghouse	$PM_{10}$	0.2	0.9
48	Meal Rail Loadout	R	outed to SN-46	

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	The state of the s	ON SUMMARY		
Source	Description	Pollutant	Emissic	n Rates
Number			lb/hr	tpy
	·	PM	0.5	2.2
		$PM_{10}$	0.5	2.2
49	Boiler #3	$SO_2$	1.0	4.4
49	Doller #3	VOC	0.4	1.6
		CO	5.6	24.2
		$NO_x$	6.6	28.8
		PM	0.8	3.3
		$PM_{10}$	0.8	3.3
50	. Dailan #4	$SO_2$	1.5	6.5
30	Boiler #4	VOC	0.6	2.4
		CO	8.3	36.1
		$NO_x$	9.8	43.0
		PM	0.1	0.3
		$PM_{10}$	0.1	0.3
51	#3 Deodorizer Dowtherm	$SO_2$	0.2	0.6
31	Boiler	VOC	0.1	0.3
		CO	0.8	3.2
		$NO_x$	0.9	3.8
		PM	0.1	0.3
		$PM_{10}$	0.1	0.3
52	#2 Deodorizer Dowtherm	$\mathrm{SO}_2$	0.2	0.6
32	Boiler	VOC	0.1	0.3
		CO	0.8	3.2
		$NO_x$	0.9	3.8
	Stabilized Bran Receiving	PM	1.5	6.3
53	(one area) and Loadout (two	$PM_{10}$	0.5	2.2
	areas)	1 14110	0.5	2.2
54	Bran Receiving Tanks Bin	PM	0.1	0.1
J-1	Vent Filter (2 Tanks)	PM <sub>10</sub>	0.1	0.1
		PM	1.4	5.9
55	Bran DTDC Cyclones	$PM_{10}$	1.4	5.9
ږر	(3 Total)	VOC	1.7	7.3
		n-Hexane	1.1	4
56	Bran Solvent Extraction	VOC	1.0	4.4
50	(MOS Vent)	n-Hexane	0.64	4
57	Bran Solvent Extraction	VOC	72.7	318.3
31	(Fugitive Losses)	n-Hexane	46.5	4

	EMISSIO	N SUMMARY		
Source	Description	Pollutant	Emissio	n Rates
Number	Î		lb/hr	tpy
58	Defatted Bran Storage Bin and Bin Vent Filter (2 Tanks)	PM PM <sub>10</sub>	0.1 0.1	0.1 0.1
59	30,000 gallon Hexane Storage Tank	Route	d to extraction pl	ant
60	12,000 Gallon Hexane Storage Tank	Route	d to extraction pl	ant
61	12,000 Gallon Hexane Storage Tank	Route	d to extraction pl	ant
64	10,000 Gallon Acetone Storage Tank	Routed	to VIC unit (SN	-68)
65	10,000 Gallon Acetone Storage Tank	Routed to VIC unit (SN-68)		
66	Dowtherm Fugitives	VOC Biphenyl	0.3 0.1	1.0 0.3
68	Lecithin Plant VIC Emissions	Acetone	14.8	430.9 <sup>5</sup>
69	Gas Plant Reformer Furnace	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_x \end{array}$	0.2 0.2 0.3 0.1 1.3 1.5	0.5 0.5 1.0 0.4 5.5 6.5
70	Bleaching Clay Tank Baghouse	PM PM <sub>10</sub>	0.3 0.1	1.1 0.4
71	Bleaching Clay Receiver Filter	PM PM <sub>10</sub>	0.1 0.1	0.2 0.1
72	Lecithin Plant Fugitives	Acetone	83.6	430.9 <sup>5</sup>
74	Lime Tank Bin Vent	PM PM <sub>10</sub>	0.5 0.4	1.5 1.4
75	Bentonite Tank Bin Vent Filter	PM PM <sub>10</sub>	0.4 0.2	1.4 0.5
76	Amarillo Dryer #1	PM PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>x</sub>	6.3 1.7 0.4 0.2 2.1 2.5	22.9 <sup>2</sup> 6.4 <sup>2</sup> 1.7 0.6 9.1 10.8

	EMISSION SUMMARY					
Source	Description	Pollutant	Emissio	n Rates		
Number			lb/hr	tpy		
		PM	6.3	$22.9^{2}$		
		$PM_{10}$	1.7	$6.4^{2}$		
77	A	$SO_2$	0.4	1.7		
77	Amarillo Dryer #2	VOC	0.2	0.6		
		CO	2.1	9.1		
		$NO_x$	2.5	10.8		
79	Gasifier Hull Receiving Pit	PM	0.6	0.9		
	Enclosure	$PM_{10}$	0.2	0.2		
80	Gasifier Hull Receiving Tanks	PM	0.1	0.1		
80	(2) Bin Vent Filter	$PM_{10}$	0.1	0.1		
81	Gasifier Ash Receiving Tank	PM	0.3	1.1		
01	Bin Vent Filter	$PM_{10}$	0.1	0.4		
92	Cosifica Asla I coslove	PM	0.1	0.1		
82	Gasifier Ash Loadout	$PM_{10}$	0.1	0.1		
83	Hot Dehull Bean Heater	PM	1.1	4.9		
83	Cyclone	$PM_{10}$	1.1	4.9		
86	Soybean Collet Dryer/Cooler	PM	3.6	15.8		
80	Cyclone	$PM_{10}$	0.9	4.0		
		PM	35.3	154.6		
		$PM_{10}$	17.7	77.3		
87	Thermal Energy Conversion System	$\mathrm{SO}_2$	34.8	152.5		
07		VOC	9.0	39.5		
		CO	21.2	92.9		
		$NO_x$	73.5	322.0		
88	Soybean Germ Receiver	PM	0.1	0.4		
88	Baghouse	PM <sub>10</sub>	0.1	0.1		
89	Soybean Aspiration Vent	PM	0.1	0.1		
07	Filter	PM <sub>10</sub>	0.1	0.1		
		PM	3.6	$23.0^{2}$		
		$PM_{10}$	1.1	$6.5^2$		
90	Terminal GSI Dryer	$SO_2$	0.5	2.0		
<del>7</del> U	Tellilliai GSI Diyei	VOC	0.2	0.8		
		CO	2.5	11.0		
		NO <sub>x</sub>	3.0	13.1		
91	GSI Dryer Hull Loadout	PM	0.5	1.9		
71	OSI Diyei Huli Loadout	PM <sub>10</sub>	0.2	0.7		
92	Prep Rotex Dust System	PM	0.5	1.9		
74	Baghouse	PM <sub>10</sub>	0.2	0.6		

EMISSION SUMMARY					
Source	Description	Pollutant	Emissio	on Rates	
Number			lb/hr	tpy	
02	A 1 D1 4 C	PM	0.3	1.1	
93	Ash Plant Conveyor Baghouse	$PM_{10}$	0.1	0.4	
	Prep Gravity Separator	PM	0.4	1.5	
94	Baghouse	$PM_{10}$	0.1	0.4	
0.5		PM	0.4	1.8	
95	Bran Hammermill Baghouse	$PM_{10}$	0.4	1.8	
		PM	0.2	0.5	
		$PM_{10}$	0.2	0.5	
0.6		$SO_2$	0.3	1.0	
96	Deodorizer Boiler	VOC	0.1	0.4	
		CO	1.2	5.2	
		$NO_x$	1.5	6.2	
0=	Terminal Dump #3	PM	0.7	1.8	
97	(Uncaptured Emissions)	$PM_{10}$	0.2	0.4	
	Terminal Dump #2 and #3	PM	0.3	0.8	
98	Baghouse	$PM_{10}$	0.1	0.2	
	Ash Plant Bagging System	PM	3.1	13.3	
99	Baghouse	$PM_{10}$	0.4	1.4	
100		PM	0.5	2.0	
100	3-Cell Cooling Tower	$PM_{10}$	0.5	2.0	
101	7 :11: G 1: T	PM	0.3	1.1	
101	Lecithin Cooling Tower	$PM_{10}$	0.3	1.1	
100	D 1 : C 1: T	PM	0.5	1.9	
102	Deodorizer Cooling Tower	$PM_{10}$	0.5	1.9	
102	S. F. A. C. T. T.	PM	0.5	1.8	
103	Soy Extraction Cooling Tower	$PM_{10}$	0.5	1.8	
104	Rice Bran Extraction Cooling	PM	0.6	2.5	
104	Tower	$PM_{10}$	0.6	2.5	
106	Dies Hull Dassiver Dassiter	PM	0.1	0.2	
100	Rice Hull Receiver Bagfilter	$PM_{10}$	0.1	0.1	
1074	Pigo Storago Pin Vont Eiltan	PM	0.1	0.1	
107A	Rice Storage Bin Vent Filter	$PM_{10}$	0.1	0.1	
107D	Recovered Rice Truck	PM	2.2	0.4	
107B	Loadout	$PM_{10}$	0.8	0.2	
108	Pigo Storage Duilding	PM	3.3	3.3	
108	Rice Storage Building	$PM_{10}$	1.8	1.8	
109	Ash Landfill				
110	Receiving Pit # 4 Baghouse	PM	1.1	1.9	
110	Receiving Fit # 4 Dagnouse	PM <sub>10</sub>	0.4	0.6	

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	EMISSION SUMMARY					
Source	rce Description Pollutant Emission Rates					
Number			lb/hr	tpy		
111	Unit 4 Trash Tank	PM	0.1	0.1		
111	Omt 4 Trash Tank	$PM_{10}$	0.1	0.1		
112	Cogan Caaling Towar	PM	0.1	0.3		
112	Cogen Cooling Tower	$PM_{10}$	0.1	0.3		

<sup>\*\*</sup>Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

Total for all receiving sources (SN- 01, 02, 03, 17 and 18).

Includes non-combustion emissions of 22.0 tpy PM & 5.5 tpy PM<sub>10</sub> total for all dryers (SN-15, 16, 76, 77 and 90).

Combined limit of 381.0 tpy.

Combined limit of 212.2 tpy.

Combined limit of 430.9 tpy

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#### SECTION III: PERMIT HISTORY

Riceland Foods, Inc., Stuttgart Soybean Division was issued air permit number 331-A on May 28, 1976 to allow the construction and operation of a soybean oil extraction plant.

Permit number 502-A was issued to this facility on March 23, 1979, to install boiler #4.

Permit number 682-A was issued to Riceland Foods, Stuttgart Soybean Division on June 28, 1982 to allow this facility to construct and operate a blending elevator.

Permit number 908-A was issued on January 12, 1989. It consolidated the existing permits at the Stuttgart Soybean Division and allowed for the addition of two new baghouses to improve emission control and for the replacement of a set of cyclones in the soybean preparation plant with a baghouse. This permit set limits based on hours of operation and pounds emitted per hour.

Permit number 908-AR-1 was issued on June 28, 1991 to consolidate all air emission sources, establish annual emission limits and illustrate the applicable New Source Performance Standards (NSPS). Limits were set at 215.64 tpy of particulates and 205.14 tpy of VOCs.

Permit number 908-AR-2 was issued to this facility on October 8, 1991. It was a modification to allow for the replacement of three cyclones associated with the truck dump terminal system with a baghouse. This change resulted in a 1.89 tpy reduction of particulate emissions.

Permit number 908-AR-3 was issued on November 16, 1992. This permitting action allowed for the installation and operation of a pneumatic mill run (ground soybean hulls) conveying system. This permit also regulated emission sources omitted from permit 908-AR-1. It allowed a 5.85 tpy increase in particulate emissions.

Permit number 908-AR-4 allowed for the addition of the rice bran extraction plant to the permit.

Permit number 908-AR-5 was issued on November 13, 1995. It was a modification to consolidate air permits for the grain dryer (dryer 4) permit number 469-AR-3 and the Soya division permit number 908-AR-4. It resulted in increases of 65.2 tpy of hexane and 20 tpy of VOC and a decrease of 120.9 tpy of particulates through the removal of the soybean dryers.

Permit number 908-AR-6 was issued on October 18, 1996. It was a permit modification to add a gasification facility at Riceland (the combustion of the gasses to be permitted under 1706-A) and the incorporation of new AP-42 factors for grain handling and vegetable oil processing. Permitted emission consisted of 231.1 tpy of particulate matter, 1.4 tpy of sulfur dioxide, 197.0 tpy of nitrogen oxides, 47.6 tpy of carbon monoxide and 640 tpy of volatile organic compounds.

Permit number 1706-A was issued to S-TECS, L.L.C., on December 6, 1996 for the construction of a thermal energy conversion system (TECS) in Stuttgart, Arkansas, at Riceland Foods, Inc. (Riceland) Soya Division. Permitted emissions from S-TECS consisted of 21.0 tons per year of

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particulate matter, 92.9 tons per year of sulfur dioxide, 97.2 tons per year of nitrogen oxides, 92.9 tons per year of carbon monoxide and 39.4 tons per year of volatile organic compounds.

Permit 0908-AOP-R0 was issued on February 14, 2008. This permit was the initial Title V permit for the facility. It incorporated two formerly separate permits Riceland Foods, Inc., Stuttgart Soybean Division (AFIN 01-00008) and S-TECS, L.L.C. (AFIN 01-00155). The permit also:

- Addressed New Source Review (NSR) issues related to the TECS unit. Originally this unit was permitted as a minor source and subsequent operation and testing revealed emissions to be in excess of Prevention of Significant Deterioration of Air Quality (PSD) permitting thresholds.
- Included equipment upgrades planned at the Rice Bran Oil Extraction Plant that increased potential rice bran processing capacity from 600 tons per day (tpd) to approximately 800 tpd. The volatile organic compounds (VOC) net emissions increased resulting from the expansion exceeded 40 tpy. Therefore, the Rice Bran Oil expansion project required PSD review for VOC emissions.
- Incorporated the MACT requirements for the soybean oil extraction process.
- Incorporated soapstock and glycerine as a feed to the TECs unit.
- Added a rice recovery operation (SN-106, 107A and 107B).
- Added a rice hull storage building, designated SN-108.

Permit 0908-AOP-R1 was issued on August 3, 2009. This permit allowed the facility to increase the permitted production limits for the Storage Truck Loadout (SN-14), Blending End Receiving (SN-18), and Terminal Dump # 3 (SN-97), and decrease the permitted production limit for the Terminal End Receiving (SN-17). The throughput changes resulted in emissions increases and decreases at the following downstream sources: SN-06, SN-07, SN-11, SN-14, SN-17, SN-18, SN-19, SN-21, SN-24, SN-31, SN-36, SN-97, and SN-98. The facility also added "dustless" nozzles to the downspouts on Storage Truck Loadout (SN-14) and Terminal Loadout (SN-24) to control particulate emissions. The description for SN-96 was updated from the Deodorizer Dowtherm Boiler to a Deodorizer Boiler. Additionally, Riceland removed of all condensable PM Method 202 testing requirements. The permit was updated to include SO<sub>2</sub> testing at SN-87, as well as added an alternate monitoring method in Specific Condition 85. The permitted emission decreases included 28.6 tpy of PM and 9.6 tpy of PM<sub>10</sub>. Due to errors in the emission summary table the new total permitted emissions include 350.2 tpy of PM, 170.1 tpy of PM<sub>10</sub>, 174.7 tpy of SO<sub>2</sub>, 972.2 tpy of VOC, 214.1 tpy of CO, and 466.1 tpy of NO<sub>x</sub>.

Permit 0908-AOP-R2 was issued on August 13, 2009. This permit removed Specific Conditions # 12 and # 22 in accordance with the Response to Comments on Draft Permit 0908-AOP-R1. Any references to these specific conditions were also removed. There were no permitted emission changes with this Administrative Amendment.

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#### **SECTION IV: SPECIFIC CONDITIONS**

SN-01 - SN-05, SN-07, SN-09 - SN-10, SN-12 - SN-16, SN-76, SN-77, SN-106, SN-107A, SN-107B, SN-108, SN-110, and SN-111

Dryer Complex

## Source Description

The dryer complex handles rice, soybeans, and wheat. The complex consists of two (2) units. One unit is referred to as the "West End" and other unit is designated as the "Annex".

## **Specific Conditions**

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 6, 8, and 11, and Plantwide Condition 8, and maximum equipment operating capacities. [Regulation 19, §19.501 et seq., and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
01	Receiving Pit #4 (Uncaptured Emissions)	PM <sub>10</sub>	0.1	
02	Receiving Pit #5 (Uncaptured Emissions)	PM <sub>10</sub>	0.1	0.4***
03	Receiving Pit #6 (Uncaptured Emissions)	PM <sub>10</sub>	0.1	
04	Receiving Pits #4 and #5 Scalperator and Baghouse	PM <sub>10</sub>	0.1	0.4
05	Upper Nuisance Dust Collection System and Baghouse	PM <sub>10</sub>	0.3	0.2
07	Receiving Pit #5 Aspiration Multiclone	PM <sub>10</sub>	0.1	0.1
09	Receiving Pit #6 Aspiration and Scalperator and Baghouse	PM <sub>10</sub>	0.1	0.3
10	Upper and Lower Nuisance Dust Collection System and Baghouse	PM <sub>10</sub>	0.2	0.2
12	Pit #6 Trash Tank with filter			
12B	Pit #6 Trash Tank Truck Load out (uncontrolled emissions)	PM <sub>10</sub>	0.1	0.1
13	Annex Trash Tank with filter	DM	0.1	0.1
13B	Annex Trash Tank Truck Load out	PM <sub>10</sub>	0.1	0.1
14	Storage Truck Loadout	$PM_{10}$	0.5	2.2

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SN	Description	Pollutant	lb/hr	tpy
		PM <sub>10</sub>	0.4	6.0****
		SO <sub>2</sub>	0.3	1.0
15	Small Shanzer Dryer	VOC	0.1	0.4
		СО	1.3	5.5
	· · · · · · · · · · · · · · · · · · ·	NO <sub>x</sub>	1.5	6.5
		PM <sub>10</sub>	0.6	6.4***
		SO <sub>2</sub>	0.4	1.7
16	Large Shanzer Dryer	VOC	0.2	0.6
		СО	2.1	9.1
		NO <sub>x</sub>	2.5	10.8
		PM <sub>10</sub>	1.7	6.4***
	Amarillo Dryer #1	SO <sub>2</sub>	0.4	1.7
76		VOC	0.2	0.6
		СО	2.1	9.1
		NO <sub>x</sub>	2.5	10.8
		PM <sub>10</sub>	1.7	6.4***
		SO <sub>2</sub>	0.4	1.7
77	Amarillo Dryer #2	VOC	0.2	0.6
		СО	2.1	9.1
		NO <sub>x</sub>	2.5	10.8
106	Rice Hull Receiver Bagfilter	PM <sub>10</sub>	0.1	0.1
107A	Rice Storage Bin Vent Filter	PM <sub>10</sub>	0.1	0.1
107B	Recovered Rice Truck Loadout	PM <sub>10</sub>	0.8	0.2
108	Rice Storage Building	PM <sub>10</sub>	1.8	1.8
110	Receiving Pit # 4 Baghouse	PM <sub>10</sub>	0.4	0.6
111	Unit 4 Trash Tank	PM <sub>10</sub>	0.1	0.1

<sup>\*\*\*</sup> Total for all receiving sources (SN-01, 02, 03, 04, 17, and 18)

\*\*\*\* Includes non-combustion emissions of 5.5 tpy PM<sub>10</sub> total for all dryers (SN-15, 16, 76, 77 and 90)

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2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 6, 8, and 11, and, Plantwide Condition 8, and maximum equipment operating capacities. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Receiving Pit #4 (Uncaptured Emissions)	PM	0.3	
02	Receiving Pit #5 (Uncaptured Emissions)	PM	<i>A</i> 0.3 1.8**	
03	Receiving Pit #6 (Uncaptured Emissions)	PM	PM 0.3	
04	Receiving Pits #4 and #5 Scalperator and Baghouse	PM	0.4	1.3
05	Upper Nuisance Dust Collection System and Baghouse	PM	0.5	0.4
07	Receiving Pit #5 Aspiration Multiclone	PM	0.3	0.2
09	Receiving Pit #6 Aspiration and Scalperator and Baghouse	Receiving Pit #6 Aspiration and PM 0.3		1.1
10	Upper and Lower Nuisance Dust Collection System and Baghouse  PM 0.2		0.4	
12	Pit #6 Trash Tank with filter			
12B	Pit #6 Trash Tank Truck Load out (uncontrolled emissions)	PM	0.1	0.1
13	Annex Trash Tank with filter	D) (	0.1	0.1
13B	Annex Trash Tank Truck Load out	PM	0.1	0.1
14	Storage Truck Loadout	PM	1.5	6.3
15	Small Shanzer Dryer	PM	1.0	22.5****
16	Large Shanzer Dryer	PM	1.6	22.9****
76	Amarillo Dryer #1	PM	6.3	22.9****
77	Amarillo Dryer #2	PM	6.3	22.9****
106	Rice Hull Receiver Bagfilter	PM	0.1	0.2
107A	Rice Storage Bin Vent Filter	PM	0.1	0.1
107B	Recovered Rice Truck Loadout PM		2.2	0.4

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SN	Description Pollutant lb/hr t			
108	Rice Storage Building	PM	3.3	3.3
110	Receiving Pit # 4 Baghouse	PM	1.1	1.9
111	Unit 4 Trash Tank	PM	0.1	0.1

3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9 and Specific Condition 4.

SN	Limit	Regulatory Citation
01	40%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
02	40%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
03	40%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
04	0%	Regulation No. 19 §19.304 and 40 CFR 60, Subpart DD
05	0%	Regulation No. 19 §19.304 and 40 CFR 60, Subpart DD
07	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
09	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
10	0%	Regulation No. 19 §19.304 and 40 CFR 60, Subpart DD
12	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
13	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
14	40%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
15	0%	Regulation No. 19 §19.304 and 40 CFR 60, Subpart DD
16	0%	Regulation No. 19 §19.304 and 40 CFR 60, Subpart DD
76	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
77	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
106	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
107A	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
107B	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E

<sup>\*\*\*</sup> Total for all receiving sources (SN-01, 02, 03, 04, 17, and 18)

\*\*\*\* Includes non-combustion emissions of 22.0 tpy PM total for all dryers (SN-15, 16, 76, 77 and 90)

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SN	Limit	Regulatory Citation
108	10%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
110	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
111	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E

- 4. The permittee shall conduct weekly observations of the opacity from sources SN-04, 05, 09, 10, 12, 13, 15, 16, 76, 77, 106, 107A, 108 and daily observations from SN-01, 02, 03, 06, 07, 11, 14, 107B, 110, and 111. Records of these observations shall be maintained on site. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep the records onsite and make the records available to Department personnel upon request. [Regulation 18, §18.501; Regulation 19, §19.503; and 40 CFR 52, Subpart E]
- 5. During the loading of waste material generated from grain cleaning and pollution control devices from trash tanks onto trucks for the purposes of disposal, Riceland shall be limited to 20% opacity, to be determined by averaging all readings taken in accordance with USEPA Method 9, over a period of thirty-six consecutive minutes. If, at any time, Riceland exceeds the opacity limitation, the occurrence shall be reported to ADEQ in accordance with Regulation 18.

Riceland shall maintain a written log at the facility which documents each time material is loaded from the trash tanks onto a truck. Each entry shall include the approximate weight of the material loaded, and the duration of the loading operation.

The activity shall be conducted in such a manner as to cause no nuisance to the surrounding community. ADEQ reserves the right to rescind this authority if, at any time, the emissions from the operations become a nuisance to the surrounding community. [Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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6. The permittee shall not exceed the throughputs in the following table. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

SN	Throughput – tons of grain per day	
SN-01	3300	
SN-02	3300	
SN-03	2400	
04	3300	
09	2400	
14	2000	
15	2400	
16	2400	
76	3300	
77	3300	

- 7. The permittee will maintain monthly records to demonstrate compliance with Specific Condition 6. The permittee will maintain daily records on-site and made available to Department personnel upon request. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 8. The maximum allowable throughput at SN-108 is 150,000 tons per year of rice hulls per consecutive 12-month period. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]
- 9. The permittee will maintain monthly records to demonstrate compliance with Specific Condition 8. The permittee will maintain a twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

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10. The facility is an affected facility under 40 CFR 60 Subpart DD—Standards of Performance for Grain Elevators. Applicable provisions include:

a. SN-15, 16

On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any gases which exhibit greater than 0 percent opacity from any Column dryer with column plate perforation exceeding 2.4 mm diameter (ca. 0.094 inch). Compliance with this condition is demonstrated by compliance with the opacity limits of Specific Condition 3. [Regulation 19, §19.304 and 40 CFR 60.302(a)(1)]

b. SN-04, 05 and 10

On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

- (1) Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).
- (2) Exhibits greater than 0 percent opacity.

On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any fugitive emission from:

- (1) Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity (SN-04)
- (2) Any grain handling operation which exhibits greater than 0 percent opacity. (SN-05, 10)

The facility shall maintain records of the tests required by this condition.

[Regulation No. 19 §19.304 and 40 CFR 60.302(b)(1) and (2)]

11. The permittee shall install and operate the dustless nozzles control equipment associated with SN-14 in a manner consistent with good air pollution control practices in order to comply with the applicable emission limits. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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# SN-17 - SN-27, SN-31 - SN-33, SN-35, SN-36, SN-90, SN-91, SN-97, SN-98 Terminal and Blending

## Source Description

The equipment used in the Blending and Terminal Elevators is simply grain moving, handling, and cleaning equipment such as belt and drag conveyors, cup elevators, scalperators, and scales. There is also a dryer associated with the unit

# Specific Conditions

12. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 17 and 20, and Plantwide Condition 8, and maximum equipment operating capacities. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description Pollutant lb.			tpy
17	Terminal End Receiving (Uncaptured Emissions)	PM <sub>10</sub>	0.2	0.4***
18	Blending End Receiving	PM <sub>10</sub>	0.2	
19	Terminal Truck Dust System Bagfilter	$PM_{10}$	0.1	0.1
20	Baghouse at Terminal Basement	PM <sub>10</sub>	1.0	1.1
21	Terminal Trash Tank Bin Vent Filter			
21B	Terminal Trash Tank Loadout (uncontrolled)	$PM_{10}$	0.1	0.1
22	Mill Run (Bin 521) Bagfilter	$PM_{10}$	0.3	1.1
22B	Mill Run (Bin 521) Truck Loadout	L 1v110	0.5	1.1
23	Mill Run (Bin 519) Bagfilter	D) (	0.3	1.1
23B	Mill Run (Bin 519) Truck Loadout	$PM_{10}$	0.3	1.1
24	Terminal Truck Loadout	PM <sub>10</sub>	0.3	1.3
25	Blending Elevator - System A1 Baghouse	PM <sub>10</sub> 0.4 1		1.1
26	Blending Elevator - System A2 Baghouse	PM <sub>10</sub> 0.4 1		1.1
27	Blending Elevator - System B1 Baghouse	PM <sub>10</sub> 0.4 1.		1.1
31	Blending Elevator - System D1 Baghouse	PM <sub>10</sub> 0.1		0.1

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SN	Description	Pollutant	lb/hr	tpy
32	Blending Elevator - System D2 Baghouse	PM <sub>10</sub>	0.4	1.1
33	Blending Elevator - System E1 Baghouse	$PM_{10}$	0.4	1.1
35	Blending Elevator – System F Baghouse	$PM_{10}$	0.4	1.1
36	Blending Elevator Trash Tank	$PM_{10}$	0.1	0.1
		PM <sub>10</sub>	1.1	6.5****
		$SO_2$	0.5	2.0
90	Terminal Dryer	VOC	0.2	0.8
		CO	2.5	11.0
		NO <sub>x</sub>	3.0	13.1
91	GSI Dryer Hull Loadout	PM <sub>10</sub>	0.2	0.7
97	Terminal Dump #3 (Uncaptured Emissions)	PM <sub>10</sub>	0.2	0.4
98	Terminal Dump #2 and #3 Baghouse	$PM_{10}$	0.1	0.2

<sup>\*\*\*</sup> Total for all receiving sources (SN-01, 02, 03, 04, 17, and 18)

13. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 17 and 20, and Plantwide Condition 8, and maximum equipment operating capacities. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
17	Terminal End Receiving	Terminal End Receiving PM 1.0		1.8***
18	Blending End Receiving	PM	0.7	1.0
19	Terminal Truck Dust System Bagfilter	PM 0.1 0.1		0.1
20	Baghouse at Terminal Basement	PM 1.7		1.9
21	Terminal Trash Tank Bin Vent Filter	DM 0.1 0		0.1
21B	Terminal Trash Tank Loadout	PM 0.1		0.1
22	Mill Run (Bin 521) Bagfilter	PM 0.8 3.2		3.2

<sup>\*\*\*\*</sup> Includes non-combustion emissions of 5.5 tpy PM<sub>10</sub> total for all dryers (SN-15, 16, 76, 77 and 90)

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SN	Description	Pollutant	lb/hr	tpy
22B	Mill Run (Bin 521) Truck Loadout			
23	Mill Run (Bin 519) Bagfilter			2.0
23B	Mill Run (Bin 519) Truck Loadout	PM	0.8	3.2
24	Terminal Truck Loadout	PM	0.9	3.8
25	Blending Elevator - System A1 Baghouse	PM	0.6	1.9
26	Blending Elevator - System A2 Baghouse	PM	0.6	1.9
27	Blending Elevator - System B1 Baghouse	PM 0.6 1.9		1.9
31	Blending Elevator - System D1 Baghouse	Blending Elevator - System D1		0.1
32	Blending Elevator - System D2 Baghouse	or - System D2 PM 0.6 1.0		1.9
33	Blending Elevator - System E1 Baghouse	Blending Elevator - System E1 PM 0.6		1.9
35	Blending Elevator – System F Baghouse  PM 0.6		1.9	
36	Blending Elevator Trash Tank	PM	0.1	0.1
90	Terminal Dryer	PM	3.6	23.0****
91	GSI Dryer Hull Loadout	PM	0.5	1.9
97	Terminal Dump #3 (Uncaptured PM 0.7 Emissions)		1.8	
98	Terminal Dump #2 and #3 Baghouse PM 0.3 0.8			0.8

#### Visible emissions may not exceed the limits specified in the following table of this permit 14. as measured by EPA Reference Method 9 and Specific Condition 15.

SN	Limit	Regulatory Citation
17	40%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
18	40%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
19	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
20	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as

<sup>\*\*\*</sup> Total for all receiving sources (SN-01, 02, 03, 04, 17, and 18)

\*\*\*\* Includes non-combustion emissions of 22.0 tpy PM total for all dryers (SN-15, 16, 76, 77 and 90)

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SN	Limit	Regulatory Citation
		referenced by §8-4-304 and §8-4-311
21	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
22	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
23	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
24	40%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
25	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
26	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
27	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
31	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
32	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
33	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
35	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
36	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
90	0%	Regulation No. 19 §19.304 and 40 CFR 60, Subpart DD
91	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
97	5%	Regulation No. 19 §19.304 and 40 CFR 60, Subpart DD
98	0%	Regulation No. 19 §19.304 and 40 CFR 60, Subpart DD

15. The permittee shall conduct daily observations of the opacity from SN-17, 18, 24 and weekly observations from SN-19 through 23 and 25-27, 31-33, 35, 36, 90, 97 and 98 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep the records onsite and make the records available to Department personnel upon request. [Regulation 18, §18.501; Regulation No. 19 §19.503; and 40 CFR 52, Subpart E]

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During the loading of waste material generated from grain cleaning and pollution control devices from trash tanks onto trucks for the purposes of disposal, Riceland shall be limited to 20% opacity, to be determined by averaging all readings taken in accordance with USEPA Method 9, over a period of thirty-six consecutive minutes. If, at any time, Riceland exceeds the opacity limitation, the occurrence shall be reported to ADEQ in accordance with Regulation 18.

Riceland shall maintain a written log at the facility which documents each time material is loaded from the trash tanks onto a truck. Each entry shall include the approximate weight of the material loaded, and the duration of the loading operation.

The activity shall be conducted in such a manner as to cause no nuisance to the surrounding community. ADEQ reserves the right to rescind this authority if, at any time, the emissions from the operations become a nuisance to the surrounding community. [Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

17. The permittee shall not exceed the throughputs in the following table. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

SN	Throughput – tons of grain per day
17	6300
18	4500
24	1200
97	4500

- 18. The permittee will maintain monthly records to demonstrate compliance with Specific Condition No 17. The permittee will maintain daily records on-site and made available to Department personnel upon request. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 19. The facility is an affected facility under 40 CFR 60 Subpart DD—Standards of Performance for Grain Elevators. Applicable provisions include:

#### a. SN-90

On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any gases which exhibit greater than 0 percent opacity from any Column dryer with column plate perforation exceeding 2.4 mm diameter (ca. 0.094 inch). Compliance with this condition is demonstrated by

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compliance with the opacity limits of Specific Condition 14. [Regulation 19, §19.304 and 40 CFR 60.302(a)(1)]

b. SN-98

On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:

- (1) Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).
- (2) Exhibits greater than 0 percent opacity.
- c. On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any fugitive emission from:
  - (1) Any grain handling operation which exhibits greater than 0 percent opacity. (SN-98)
  - (2) Any truck loading station which exhibits greater than 10 percent opacity. (SN- 97)

The facility shall maintain records of the tests required by this condition.

[Regulation 19, §19.304 and 40 CFR 60.302]

20. The permittee shall install and operate the dustless nozzles control equipment associated with SN-24 in a manner consistent with good air pollution control practices in order to comply with the applicable emission limits. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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SN-37 - SN-46, SN-48, SN-59, SN-75, SN-83, SN-86, SN-88, SN-89, SN-92 & SN-94 Soybean Preparation, Extraction and Meal Handling

# Source Description

In this area, soybeans are prepared and processed through an oil extraction facility.

# **Specific Conditions**

21. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 24 and 25, and maximum equipment operating capacities. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
37	Hot Dehull System Cyclone	PM <sub>10</sub>	1.1	4.6
38	Flaking Roller Cyclone	$PM_{10}$	2.1	9.0
39	Meal Grinding Baghouse	PM <sub>10</sub>	0.8	3.4
40	Meal Dryer Cooler	PM <sub>10</sub>	0.5	1.8
40	Cyclones (3 total)	VOC	11.3	*
41	Soybean Solvent Extraction Mineral Oil Stripper	VOC	34.9	*
42	Soybean Solvent Extraction Fugitive Losses	VOC	89.2	*
43	Meal Storage Receiver Baghouse	$PM_{10}$	0.1	0.5
44	Meal Storage to Flat Storage/Loadout	PM <sub>10</sub>	0.1	0.5
45	Meal to Flat Storage/Loadout	PM <sub>10</sub>	0.1	0.5
46	Meal Dust System Baghouse	PM <sub>10</sub>	0.2	0.9
48	Meal Rail Loadout	Routed to SN-46		
59	30,000 gallon Hexane Storage Tank	Routed to extraction plant		
75	Bentonite Tank Bin Vent Filter	PM <sub>10</sub>	0.2	0.5
83	Hot Dehull Bean Heater Cyclone	PM <sub>10</sub>	1.1	4.9

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SN	Description	Pollutant	lb/hr	tpy
86	Soybean Collet Dryer/Cooler Cyclone	PM <sub>10</sub>	0.9	4.0
88	Soybean Germ Receiver Baghouse	$PM_{10}$	0.1	0.1
89	Soybean Aspiration Vent Filter	PM <sub>10</sub>	0.1	0.1
92	Prep Rotex Dust System Baghouse	PM <sub>10</sub>	0.2	0.6
94	Prep Gravity Separator Baghouse	PM <sub>10</sub>	0.1	0.4

<sup>\*</sup> Combined limit of 593.3 tpy

22. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition 27 and maximum equipment operating capacities. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
37	Hot Dehull System Cyclone	PM	1.1	4.6
38	Flaking Roller Cyclone	PM	8.3	36.0
39	Meal Grinding Baghouse	PM	0.8	3.4
40	Meal Dryer Cooler	PM	0.5	1.8
40	Cyclones (3 total)	n-Hexane	7.23	*
41	Soybean Solvent Extraction Mineral Oil Stripper	n-Hexane	22.3	*
42	Soybean Solvent Extraction Fugitive Losses	n-Hexane	57.1	*
43	Meal Storage Receiver Baghouse	PM	0.1	0.5
44	Meal Storage to Flat Storage/Loadout	PM	0.1	0.5
45	Meal to Flat Storage/Loadout	PM	0.1	0.5
46	Meal Dust System Baghouse	PM	0.2	0.9
48	Meal Rail Loadout	Routed to SN-46		
59	30,000 gallon Hexane	Routed to extraction plant		

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SN	Description	on Pollutant		tpy
	Storage Tank			
75	Bentonite Tank Bin Vent Filter	PM	0.4	1.4
83	Hot Dehull Bean Heater Cyclone	PM	1.1	4.9
86	Soybean Collet Dryer/Cooler Cyclone	PM	3.6	15.8
88	Soybean Germ Receiver Baghouse	PM	0.1	0.4
89	Soybean Aspiration Vent Filter	PM	0.1	0.1
92	Prep Rotex Dust System Baghouse	PM	0.5	1.9
94	Prep Gravity Separator Baghouse	PM	0.4	1.5

<sup>\*</sup> Combined limit of 381.0 tpy

23. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9 and Specific Condition 24.

SN	Limit	Regulatory Citation
37	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
38	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
39	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
40	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
41	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
43	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
44	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
45	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
46	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
75	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
83	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E

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SN	Limit	Regulatory Citation
86	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E
88	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
89	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
92	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
94	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311

- 24. The permittee will conduct daily observations of the opacity from SN-37, 38, 40, 83 and 86 and weekly observations from SN-39, 43-46, 75, 88, 89, 92 and 94 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep the records onsite and make the records available to Department personnel upon request. [Regulation 18, §18.501; Regulation No. 19 §19.503; and 40 CFR 52, Subpart E]
- 25. The permittee shall not exceed a VOC emission rate of 594.6 tons per rolling 12 month total as determined by a mass balance of VOC materials in the soybean oil extraction process. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]
- 26. The permittee will maintain monthly records to demonstrate compliance with Specific Condition 25. The permittee will maintain a twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 27. The permittee shall not exceed an n-Hexane emission rate of 381 tons per rolling 12 month total as determined by a mass balance of n-Hexane used in the soybean oil extraction process. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 28. The permittee will maintain monthly records to demonstrate compliance with Specific Condition 27. The permittee will maintain a twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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- 29. The n-Hexane content of the oil extraction solvent shall not exceed 64% by weight, as purchased [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311].
- 30. The permitted shall maintain an MSDS, product specification or other manufacturer information to demonstrate the limit in Specific Condition 29. This information shall be kept on site and available to Department personnel upon request [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311].
- 31. The permittee is subject to 40 CFR 63, Subpart GGGG—National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production for the soybean extraction process. The permittee shall meet the standards of 40 CFR 63.2840, including, but not limited to Specific Conditions 32 thru 42. [Regulation 19, §19.304 and 40 CFR 63, Subpart GGGG]
- 32. For each facility meeting the applicability criteria in §63.2832, you must comply with either the requirements specified in paragraphs (a) through (d), or the requirements in paragraph (e) of this section.
  - (a)(1) The emission requirements limit the number of gallons of HAP lost per ton of listed oilseeds processed. For each operating month, you must calculate a compliance ratio which compares your actual HAP loss to your allowable HAP loss for the previous 12 operating months as shown in Equation 1 of this section. 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). Equation 1 of this section follows:

$$ComplianceRatio = \frac{ActualHAPLoss}{AllowableHAPLoss}$$
 (Eq. 1)

(2) Equation 1 of this section can also be expressed as a function of total solvent loss as shown in Equation 2 of this section. Equation 2 of this section follows:

$$ComplianceRatio = \frac{f * ActualSolventLoss}{0.64 * \sum_{i=1}^{n} ((Oilseed)_{i} * (SLF)_{i})}$$
(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.

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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 this section, as follows:

Table 1 of §63.2840—Oilseed Solvent Loss Factors for Determining Allowable HAP Loss

Type of oilseed	A source that	Oilseed solvent loss factor (gal/ton)	
process	Ax source that	Existing sources	New sources
(ix) Soybean, Conventional	Uses a conventional style desolventizer to produce crude soybean oil products and soybean animal feed products	0.2	0.2

- (b) When your source has processed listed oilseed for 12 operating months, calculate the compliance ratio by the end of each calendar month following an operating month using Equation 2 of this section. When calculating your compliance ratio, consider the conditions and exclusions in paragraphs (b)(1) through (6) of this section:
- (1) If your source processes any quantity of listed oilseeds in a calendar month and the source is not operating under an initial startup period or malfunction period subject to §63.2850, then you must categorize the month as an operating month, as defined in §63.2872.
- (2) 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.
- (3) If your source shuts down and processes no listed oilseed for an entire calendar month, then you must categorize the month as a nonoperating month, as defined in §63.2872. Exclude any nonoperating months from the compliance ratio determination.
- (4) This section not applicable to Riceland

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- (5) If your source is subject to a malfunction period as defined in §63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the malfunction period.
- (6) This section not applicable to Riceland
- (c) If the compliance ratio is less than or equal to 1.00, your source was in compliance with the HAP emission requirements for the previous operating month.
- (d) To determine the compliance ratio in Equation 2 of this section, you must select the appropriate oilseed solvent loss factor from Table 1 of this section. First, determine whether your source is new or existing using Table 1 of §63.2833. Then, under the appropriate existing or new source column, select the oilseed solvent loss factor that corresponds to each type oilseed or process operation for each operating month.
- (e) Low-HAP solvent option. For all vegetable oil production processes subject to this subpart, you must exclusively use solvent where the volume fraction of each HAP comprises 1 percent or less by volume of the solvent (low-HAP solvent) in each delivery, and you must meet the requirements in paragraphs (e)(1) through (5) of this section. Your vegetable oil production process is not subject to the requirements in §§63.2850 through 63.2870 unless specifically referenced in paragraphs (e)(1) through (5) of this section.
- (1) You shall determine the HAP content of your solvent in accordance with the specifications in §63.2854(b)(1).
- (2) You shall maintain documentation of the HAP content determination for each delivery of the solvent at the facility at all times.
- (3) You must submit an initial notification for existing sources in accordance with §63.2860(a).
- (4) You must submit an initial notification for new and reconstructed sources in accordance with §63.2860(b).
- (5) You must submit an annual compliance certification in accordance with §63.2861(a). The certification should only include the information required under §63.2861(a)(1) and (2), and a certification indicating whether the source complied with all of the requirements in paragraph (e) of this section.
- (f) You may change compliance options for your source if you submit a notice to the Administrator at least 60 days prior to changing compliance options. If your source changes from the low-HAP solvent option to the compliance ratio determination option, you must determine the compliance ratio for the most recent 12 operating months beginning with the first month after changing compliance options.
- 33. Meet the compliance requirements of 40 CFR 63.2850

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- (a) General requirements. The requirements in paragraphs (a)(1)(i) through (iv) of this section apply to all affected sources:
- (1) Submit the necessary notifications in accordance with §63.2860, which include:
- (i) Initial notifications for existing sources.
- (ii) This section not applicable to Riceland
- (iii) Initial notifications for significant modifications to existing or new sources.
- (iv) Notification of compliance status.
- (2) Develop and implement a plan for demonstrating compliance in accordance with §63.2851.
- (3) Develop a written startup, shutdown and malfunction (SSM) plan in accordance with the provisions in §63.2852.
- (4) Maintain all the necessary records you have used to demonstrate compliance with this subpart in accordance with §63.2862.
- (5) Submit the reports in paragraphs (a)(5)(i) through (iii) of this section:
- (i) Annual compliance certifications in accordance with §63.2861(a).
- (ii) Periodic SSM reports in accordance with §63.2861(c).
- (iii) Immediate SSM reports in accordance with §63.2861(d).
- (6) Submit all notifications and reports and maintain all records required by the General Provisions for performance testing if you add a control device that destroys solvent.
- (b) Existing sources under normal operation. You must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for existing sources under normal operation in Table 2 of this section.
- (c) This section not applicable to Riceland:
- (1) Normal operation. Upon startup of your new source, you must meet all of the requirements listed in §63.2850(a) and Table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for new sources under normal operation in Table 2 of this section.

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- (2) This section not applicable to Riceland
- (d) This section not applicable to Riceland
- (1) Normal operation. Upon startup of your significantly modified existing or new source, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for an existing or new source that has been significantly modified in Table 2 of this section.
- (2) This section not applicable to Riceland
- (e) Existing or new sources experiencing a malfunction. A malfunction is defined in §63.2. In general, it means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or process equipment to function in a usual manner. If your existing or new source experiences an unscheduled shutdown as a result of a malfunction, continues to operate during a malfunction (including the period reasonably necessary to correct the malfunction), or starts up after a shutdown resulting from a malfunction, then you must meet the requirements associated with one of two compliance options. Routine or scheduled process startups and shutdowns resulting from, but not limited to, market demands, maintenance activities, and switching types of oilseed processed, are not startups or shutdowns resulting from a malfunction and, therefore, do not qualify for this provision. Within 15 days of the beginning date of the malfunction, you must choose to comply with one of the options listed in paragraphs (e)(1) through (2) of this section:
- (1) Normal operation. Your source must meet all of the requirements listed in paragraph (a) of this section and one of the options listed in paragraphs (e)(1)(i) through (iii) of this section:
- (i) Existing source normal operation requirements in paragraph (b) of this section.
- (ii) This section not applicable to Riceland
- (iii) Normal operation requirements for sources that have been significantly modified in paragraph (d)(1) of this section.
- (2) Malfunction period. Throughout the malfunction period, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating during a malfunction period. At the end of the malfunction period, your source must then meet all of the requirements listed in Table 1 of this section for sources under normal operation. Table 1 of this section follows:

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Table 1 of §63.2850—Requirements for Compliance with HAP Emission Standards

Are you required to	re you required to For periods of normal operation?		For malfunction periods subject to §63.2850(e)(2)?
(a) Operate and maintain your source in accordance with general duty provisions of §63.6(e)?	Yes. Additionally, the HAP emission limits will apply.	Yes, you are required to minimize emissions to the extent practible throughout the initial startup period. Such measures should be described in the SSM plan.	Yes, you are required to minimize emissions to the extent practible throughout the initial startup period. Such measures should be described in the SSM plan.
(b) Determine and record the extraction solvent loss in gallons from your source?	traction described in §63.2862(e)		Yes, as described in §63.2862(e).
(c) Record the volume fraction of HAP present at greater than 1 percent by volume and gallons of extraction solvent in shipment received?	Yes	Yes	Yes.
(d) Determine and record the tons of each oilseed type processed by your source?	Yes, as described in §63.2855	No	No.
(e) Determine the weighted average volume fraction of HAP in extraction solvent received as described in §63.2854 by the end of the following calendar month?	Yes	No. Except for solvent received by a new or reconstructed source commencing operation under an initial startup period, the HAP volume fraction in any solvent received during an initial startup period is included in the weighted average HAP determination for the next operating month	No, the HAP volume fraction in any solvent received during a malfunction period is included in the weighted average HAP determination for the next operating month.

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Are you required to	For periods of normal	For initial startup periods subject to §63.2850(c)(2) or	For malfunction periods subject to
	operation?	(d)(2)?	§63.2850(e)(2)?
(f) Determine and record the actual solvent loss, weighted average volume fraction HAP, oilseed processed and compliance ratio for each 12 operating month period as described in §63.2840 by the end of the following calendar month?	Yes	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for an initial startup period	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for a malfunction period.
(g) Submit a Notification of Compliance Status or Annual Compliance Certification as appropriate?	Notification of ompliance Status or annual Compliance Certification as described in \$\\$63.2860(d) and 63.2861(a) certification happens to the compliance certification happens to the certification of the certification of the certification and the certification of the certification as the certification and the certification as the certification and the certification as the certification as the certification and the certification as the certification and the cert		No. However, you may be required to submit an annual compliance certification for previous operating months, if the deadline for the annual compliance certification happens to occur during the malfunction period.
(h) Submit a Deviation Notification Report by the end of the calendar month following the month in which you determined that the compliance ratio exceeds 1.00 as described in §63.2861(b)?		No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for an initial startup period	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for a malfunction period.
(i) Submit a Periodic SSM Report as described in §63.2861(c)?	No, a SSM activity is not categorized as normal operation	Yes	Yes.

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Are you required to		For initial startup periods subject to §63.2850(c)(2) or (d)(2)?	For malfunction periods subject to §63.2850(e)(2)?
(j) Submit an Immediate SSM Report as described in §63.2861(d)?	No, a SSM activity is not categorized as normal operation	Yes, only if your source does not follow the SSM plan	Yes, only if your source does not follow the SSM plan.

Table 2 of §63.2850—Schedules for Demonstrating Compliance Under Various Source Operating Modes

If your source is	and is operating under	then your recordkeeping schedule	You must determine your first compliance ratio by the end of the calendar month following	Base your first compliance ratio on information recorded	
(a) Existing	Normal operation	Begins on the compliance date	The first 12 operating months after the compliance date	During the first 12 operating months after the compliance date.	
(b) New		This secti	on not applicable to Ricela	nd	
(c) Existing or new that has been significantly modified	This section not applicable to Riceland				

- 34. The permittee shall meet the plan for demonstrating compliance requirements of 40 CFR 63.2851. [Regulation 19, §19.304 and 40 CFR 63.2851]
- The permittee shall meet the startup, shutdown, and malfunction plan requirements of 40 CFR 63.2852. [Regulation 19, §19.304 and 40 CFR 63.2852]
- 36. The permittee shall determine the actual solvent loss according to 40 CFR 63.2853, except for section (a)(5)(i). [Regulation 19, §19.304 and 40 CFR 63.2853]
- 37. The permittee shall determine the weighted average volume fraction of HAP in the actual solvent loss according to 40 CFR 63.2854. [Regulation 19, §19.304 and 40 CFR 63.2854]
- The permittee shall determine the quantity of oilseed processed according to 40 CFR 63.2855. [Regulation 19, §19.304 and 40 CFR 63.2855]

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- 39. The permittee shall submit notifications, reports, and records according to 40 CFR 63.2860, except for section (b). [Regulation 19, §19.304 and 40 CFR 63.2860]
- 40. The permittee shall submit reports according to 40 CFR 63.2861. Annual certifications may be submitted in accordance with annual compliance certifications of General Condition 21. [Regulation 19, §19.304 and 40 CFR 63.2861]
- 41. The permittee shall maintain records according to 40 CFR 63.2862. [Regulation 19, §19.304 and 40 CFR 63.2862]
- 42. The permittee shall maintain records in the form and length according to 40 CFR 63.2863. [Regulation 19, §19.304 and 40 CFR 63.2863]

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## SN-53 - SN-58, SN-60, SN-61, & SN-95 Rice Bran Oil Extraction

#### Source Description

The Bran Oil Extraction Plant takes stabilized bran pellets received from the bran plants and extracts the oil. This crude oil is then sent to the Riceland Foods, Inc. refinery for processing into the final product.

#### **Specific Conditions**

43. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 46 and 49, and maximum equipment operating capacities. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
53	Stabilized Bran Receiving (one area) and Loadout (two areas)	PM <sub>10</sub>	0.5	2.2
54	Bran Receiving Tanks Bin Vent Filter (2 Tanks)	$PM_{10}$	0.1	0.1
55	Bran DTDC Cyclones	$PM_{10}$	1.4	5.9
33	(3 Total)	VOC	1.7	*
56	Bran Solvent Extraction (MOS Vent)	VOC	1.0	*
57	Bran Solvent Extraction (Fugitive Losses)	VOC	72.7	*
58	Defatted Bran Storage Bin and Bin Vent Filter (2 Tanks)	$PM_{10}$	0.1	0.1
60	12,000 Gallon Hexane Storage Tank	Routed to e	xtraction pla	nt
61	12,000 Gallon Hexane Storage Tank	Routed to extraction plant		nt
95	Bran Hammermill Baghouse	$PM_{10}$	0.4	1.8

<sup>\*</sup> Combined limit of 330.0 tpy

44. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 51 and 53, and maximum equipment operating capacities. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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SN	Description	Pollutant	lb/hr	tpy
53	Stabilized Bran Receiving (one area) and Loadout (two areas)	PM	1.5	6.3
54	Bran Receiving Tanks Bin Vent Filter (2 Tanks)	PM	0.1	0.1
55	Bran DTDC Cyclones	PM	1.4	5.9
	(3 Total)	n-Hexane	1.1	*
56	Bran Solvent Extraction (MOS Vent)	n-Hexane	0.64	*
57	Bran Solvent Extraction (Fugitive Losses)	n-Hexane	46.5	*
58	Defatted Bran Storage Bin and Bin Vent Filter (2 Tanks)	PM	0.1	0.1
60	12,000 Gallon Hexane Storage Tank	Routed to e	xtraction pla	nt
61	12,000 Gallon Hexane Storage Tank	KOUTED TO EXTRACTION PLANT		nt
95	Bran Hammermill Baghouse	PM	0.4	1.8

<sup>\*</sup> Combined limit of 212.2 tpy

45. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9 and Specific Condition 46.

SN	Limit	Regulatory Citation	
53	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E	
54	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311	
55	20%	Regulation No. 19 §19.503 and 40 CFR 52, Subpart E	
58	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311	
95	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311	

46. The permittee will conduct daily observations of the opacity from SN-53 and 55 and weekly observations from SN-54, 58 and 95 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions

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and the corrective action taken. The permittee must keep the records onsite and make the records available to Department personnel upon request. [Regulation 18, §18.501; Regulation 19, §19.503; and 40 CFR 52, Subpart E]

- 47. The permittee shall not exceed a rolling 12 month VOC emission rate of 1.98 lbs per ton of rice seed processed in the extraction plant. [Regulation 19, §19.901 et seq. and 40 CFR Part 52, Subpart E]
- 48. The permittee will maintain monthly records to demonstrate compliance with Specific Condition 47. The permittee will maintain a twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 49. The permittee shall not exceed a VOC emission rate of 331.0 tons per rolling 12 month total as determined by a mass balance of VOC materials used in the rice bran oil extraction process. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]
- 50. The permittee will maintain monthly records to demonstrate compliance with Specific Condition 49. The permittee will maintain a twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 51. The permittee shall not exceed a n-Hexane emission rate of 212.2 tons per rolling 12 month total as determined by a mass balance of n-Hexane used in the rice bran oil extraction process. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 52. The permittee will maintain monthly records to demonstrate compliance with Specific Condition 51. The permittee will maintain a twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 53. The n-Hexane content of the oil extraction solvent shall not exceed 64% by weight, as purchased. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 54. The permitted shall maintain an MSDS, product specification or other manufacturer information to demonstrate the limit in Specific Condition 53. This information shall be kept on site and available to Department personnel upon request. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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# SN-49 - SN-52, SN-69, & SN-96 Boilers and Heaters

# Source Description

Boilers and heaters at the facility consist of:

- Boiler #3 (SN-49) 67 MMBTU/hr
- Boiler #4 (SN-50) 100 MMBTU/hr
- #3 Deodorizer Dowtherm Boiler (SN-51) at 8.8 MMBTU/hr
- #4 Deodorizer Dowtherm Boiler (SN-52) at 8.8 MMBTU/hr
- Deodorizer Boiler (SN-96) at 14.423 MMBTU/hr
- Reformer Furnace (SN-69) at 15 MMBTU/hr

All boilers and heaters pre-date NSPS regulations except for SN-96, which was installed in 2005, and is subject to the recordkeeping requirements of 40 CFR 60, Subpart Dc.

## **Specific Conditions**

The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 58 and 61, and maximum equipment operating capacities. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
		$PM_{10}$	0.5	2.2
		SO <sub>2</sub>	1.0	4.4
49	Boiler #3	VOC	0.4	1.6
		СО	5.6	24.2
		NO <sub>x</sub>	6.6	28.8
		PM <sub>10</sub>	0.8	3.3
		$SO_2$	1.5	6.5
50	Boiler #4	VOC	0.6	2.4
		СО	8.3	36.1
		NO <sub>x</sub>	9.8	43.0
51	#3 Deodorizer Dowtherm Boiler	$PM_{10}$	0.1	0.3
	Downleilli Boller	SO <sub>2</sub>	0.2	0.6

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SN	Description	Pollutant	lb/hr	tpy
		VOC	0.1	0.3
		СО	0.8	3.2
		NO <sub>x</sub>	0.9	3.8
		PM <sub>10</sub>	0.1	0.3
		SO <sub>2</sub>	0.2	0.6
52	#2 Deodorizer Dowtherm Boiler	VOC	0.1	0.3
	Bowtherm Boner	СО	0.8	3.2
		NO <sub>x</sub>	0.9	3.8
		PM <sub>10</sub>	0.2	0.5
		SO <sub>2</sub>	0.3	1.0
96	Deodorizer Boiler	VOC	0.1	0.4
		СО	1.2	5.2
		NO <sub>x</sub>	1.5	6.2
		PM <sub>10</sub>	0.2	0.5
		SO <sub>2</sub>	0.3	1.0
69	Gas Plant Reformer Furnace	VOC	0.1	0.4
		СО	1.3	5.5
		NO <sub>x</sub>	1.5	6.5
66	Dowtherm Fugitives	VOC	0.3	1.0

56. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 58 and 63, and maximum equipment operating capacities. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
49	Boiler #3	PM	0.5	2.2
50	Boiler #4	PM	0.8	3.3
51	#3 Deodorizer	PM	0.1	0.3

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SN	Description	Pollutant	lb/hr	tpy
	Dowtherm Boiler			
52	#2 Deodorizer Dowtherm Boiler	PM	0.1	0.3
96	Deodorizer Boiler	PM	0.2	0.5
69	Gas Plant Reformer Furnace	PM	0.2	0.5
66	Dowtherm Fugitives	Biphenyl	0.1	0.3

57. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance with this condition is maintained by using natural gas as the sole fuel.

SN	Limit	Regulatory Citation	
49	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311	
50	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311	
51	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311	
52	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311	
96	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311	
69	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311	

- 58. The permittee shall combust only pipeline quality natural gas in SN-49 through 52, 69 and 96. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]
- 59. The permittee shall track the amount of gas used monthly in SN-96. [Regulation 19, §19.304 and 40 CFR 60, Subpart Dc]
- The permittee will maintain monthly records to demonstrate compliance with Specific Condition 59. The permittee will maintain each individual month's data on-site and will be made available to Department personnel upon request. [Regulation 19, §19.304 and 40 CFR 60, Subpart Dc]

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61. The permittee shall not exceed a combined VOC emission rate from 51, 52 and 96 of 1.0 tons per rolling 12 month total as determined by the amount of Dowtherm used. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

- 62. The permittee will maintain monthly records to demonstrate compliance with Specific Condition 61. The permittee will maintain a twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]
- 63. The permittee shall not exceed a Biphenyl emission rate of 0.3 tons per rolling 12 month total as determined by the amount of Dowtherm used. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 64. The permittee will maintain monthly records to demonstrate compliance with Specific Condition 63. The permittee will maintain a twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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# SN-70 & SN-71 Refinery

#### Source Description

The refinery at the Soya Division receives various vegetable oils (i.e., soybean, rice, bran, cottonseed, corn, canola, sunflower, peanut, etc.) from outside delivery and from within the Soya Division itself. Permitted sources include the Bleaching Clay Tank (SN-70) and the Bleaching Clay Receiver Filter (SN-71).

#### **Specific Conditions**

65. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition 67 and maximum equipment operating capacities. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
70	Bleaching Clay Tank Baghouse	$PM_{10}$	0.1	0.4
71	Bleaching Clay Receiver Filter	PM <sub>10</sub>	0.1	0.1

66. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition 67 and maximum equipment operating capacities. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
70	Bleaching Clay Tank Baghouse	PM	0.3	1.1
71	Bleaching Clay Receiver Filter	PM	0.1	0.2

67. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9 and Specific Condition 68

SN	Limit	Regulatory Citation		
70	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311		
71	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311		

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68. The permittee will conduct weekly observations from SN-70 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep the records onsite and make the records available to Department personnel upon request. [Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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# SN-74 Wastewater Treatment

# Source Description

Wastewater sources include Riceland's downtown Parboil plant, Soy Division boiler blowdown, refinery, and the Rice Bran Oil and Soybean Oil Extraction Plants. Emissions from the wastewater treatment system are negligible. However, the Lime Tank Bin Vent (SN-74) does emit minimal particulate emissions.

# **Specific Conditions**

69. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition 71 and maximum equipment operating capacities. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
74	Lime Tank Bin Vent	PM <sub>10</sub>	0.4	1.4

70. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition 71 and maximum equipment operating capacities. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	Тру
74	Lime Tank Bin Vent	PM	0.5	1.5

71. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9 and Specific Condition 72.

	SN	Limit	Regulatory Citation
Ī	74	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311

72. The permittee will conduct weekly observations of opacity from SN-74 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep

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the records onsite and make the records available to Department personnel upon request. [Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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## SN-64, SN-65, SN-68, & SN-72 Lecithin Plant

#### Source Description

Crude oil lecithin is received at the lecithin plant by truck and fed to the extractors. Acetone is the solvent used in the extraction process.

## **Specific Conditions**

73. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition 74. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
64	10,000 Gallon Acetone Tank	Ro	outed to SN-68	
65	10,000 Gallon Acetone Tank	Routed to SN-68		
68	Lecithin Plant VIC Emissions	Acetone	14.8	430.9
72	Lecithin Plant Fugitive Emissions	Acetone	83.6	430.9

- 74. The permittee shall not exceed an Acetone emission rate of 430.9 tons per rolling 12 month total as determined by a mass balance of Acetone used in the Lecithin plant. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 75. The permittee will maintain monthly records to demonstrate compliance with Specific Condition 74. The permittee will maintain a twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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# SN-79 - SN-82, & SN-87 TECS

## Source Description

The Thermal Energy Conversion System (TECS) burns rice hulls in a gasifier/boiler system to generate steam.

# **Specific Conditions**

76. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 82, 84, and 85, and maximum equipment operating capacities. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
79	Gasifier Hull Receiving Pit Choke Feed/ Enclosure	PM <sub>10</sub>	0.2	0.2
80	Gasifier Hull Receiving Tanks (2) Bin Vent Filter	$PM_{10}$	0.1	0.1
81	Gasifier Ash Receiving Tank Bin Vent Filter	$PM_{10}$	0.1	0.4
82	Gasifier Ash Loadout	PM <sub>10</sub>	0.1	0.1
		PM <sub>10</sub>	17.7	77.3
	Thermal Energy Conversion System	SO <sub>2</sub>	34.8	152.5
87		VOC	9.0	39.5
		СО	21.2	92.9
		NO <sub>x</sub>	73.5	322.0

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77. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 82 and 85, and maximum equipment operating capacities. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
79	Gasifier Hull Receiving Pit Choke Feed/ Enclosure	PM	0.6	0.9
80	Gasifier Hull Receiving Tanks (2) Bin Vent Filter	PM	0.1	0.1
81	Gasifier Ash Receiving Tank Bin Vent Filter	PM	0.3	1.1
82	Gasifier Ash Loadout	PM	0.1	0.1
87	Thermal Energy Conversion System	PM	35.3	154.6

78. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9 and Specific Conditions 80 and 81.

SN	Limit	Regulatory Citation
79	20%	Regulation No. 19 §19.901 et seq. and 40 CFR Part 52, Subpart E
80	5%	Regulation No. 19 §19.901 et seq. and 40 CFR Part 52, Subpart E
81	5%	Regulation No. 19 §19.901 et seq. and 40 CFR Part 52, Subpart E
82	20%	Regulation No. 19 §19.901 et seq. and 40 CFR Part 52, Subpart E
87	5%	Regulation No. 19 §19.901 et seq. and 40 CFR Part 52, Subpart E

79. The permittee shall not exceed the emission rates set forth in the following table. The permittee will demonstrate compliance with this condition by Specific Conditions 84 and 85. [Regulation 19, §19.901 *et seq.* and 40 CFR Part 52, Subpart E]

SN	Pollutant	Emission Limit
79	PM	0.546 lb/hr
19	$PM_{10}$	0.122 lb/hr
90	PM	0.020 lb/hr
80	$PM_{10}$	0.00491 lb/hr

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SN	Pollutant	Emission Limit
81	PM	0.251 lb/hr
81	PM <sub>10</sub>	0.088 lb/hr
82	PM	0.00081 lb/hr
02	PM <sub>10</sub>	0.000382 lb/hr
		3.5 lbs/ton of fuel
	$NO_X$	burned
		(30-day rolling average)
87	PM	0.06 lb/MMBtu
	PM <sub>10</sub>	(3-hour average)
		1.85 lb/ton of fuel
	SO2	burned
		(3-hour average)

- 80. The permittee will conduct daily observations of the opacity from SN-79 and 82 and weekly observations from SN-80 and 81 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep the records onsite and make the records available to Department personnel upon request. [Regulation 18, §18.501; Regulation 19, §19.503; and 40 CFR 52, Subpart E]
- 81. The permittee will conduct daily observations of the opacity from SN-87 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep the records onsite and make the records available to Department personnel upon request. [Regulation 19, §19.304 and 40 CFR 64]
- 82. The permittee shall not exceed a total feed rate of 21 tons per hour rice hulls and soapstock and glycerine combined nor 6500 lb/hr of a soapstock/glycerine mix to the gasifiers. Rice hulls, soapstock and glycerine are the only allowable fuels for this source. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]
- 83. The permittee shall measure the flow to each of the three (3) gasifiers using dry solids flow metering devices to demonstrate compliance with Specific Condition # 82. The permittee shall maintain daily records of the total hourly rice hull feed to the gasifiers. The permittee must keep the records onsite and make the records available to Department personnel upon request. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

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84. The permittee shall install and maintain a Continuous Emission Monitor for NOx. The monitor shall be operated in accordance with ADEQ's Continuous Emission Monitoring Systems Conditions (attached as appendix). The CEM shall be installed and operational in conjunction with the testing timeframes of Specific Condition 85. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

85. The permittee must test SN-87 within sixty (60) days of achieving the maximum production rate, but no later than outlined in the Compliance Plan and Schedule section of this permit. Testing shall be repeated every 5 years thereafter. The permittee shall test for PM, PM<sub>10</sub>, SO<sub>2</sub>, NOx and CO. PM and PM<sub>10</sub> testing shall include Method 5/201A; compliance with the BACT limits of Specific Condition 79 shall be based on Methods 5/201A alone. SO<sub>2</sub> testing shall be in accordance with test method 6. NOx and CO testing shall be in accordance with test methods 7E and 10, respectively, or other methods approved by the Department. Testing shall be performed at maximum operating rates and utilizing rice hulls as the sole fuel during the test. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee will submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]

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# SN-93 & SN-99 Ash Plant

#### Source Description

Rice hull ash is transferred from the TECS ash tank by drag conveyor to the ash plant. The ash is then either loaded into 800 pound totes or is sent to a bagger for producing 10 kg bags. There is a nuisance dust system with a baghouse for the ash conveyors (SN-93). The bagger has a dedicated dust control system (SN-99).

# **Specific Conditions**

86. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition 88 and maximum equipment operating capacities. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
93	Ash Plant Conveyor Baghouse	$PM_{10}$	0.1	0.4
99	Ash Plant Bagging System Baghouse	$PM_{10}$	0.4	1.4

87. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition 88 and maximum equipment operating capacities. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
93	Ash Plant Conveyor Baghouse	PM	0.3	1.1
99	Ash Plant Bagging System Baghouse	PM	3.1	13.3

88. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9 and Specific Condition 89.

SN	Limit	Regulatory Citation
93	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311

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Sì	1	Limit	Regulatory Citation
99	)	5%	Regulation No. 18 §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311

89. The permittee will conduct weekly observations from SN-93 and 99 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep the records onsite and make the records available to Department personnel upon request. [Regulation 18, §18.501; Regulation 19, §19.503; and 40 CFR 52, Subpart E]

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# SN-100 - SN-104, & SN-112 Cooling Towers

#### **Specific Conditions**

90. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment operating capacities. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
100	3-Cell Cooling Tower	PM <sub>10</sub>	0.5	2.0
101	Lecithin Cooling Tower	PM <sub>10</sub>	0.3	1.1
102	Deodorizer Cooling Tower	PM <sub>10</sub>	0.5	1.9
103	Soy Extraction Cooling Tower	PM <sub>10</sub>	0.5	1.8
104	Rice Bran Extraction Cooling Tower	PM <sub>10</sub>	0.6	2.5
112	Cogen Cooling Tower	PM <sub>10</sub>	0.1	0.3

91. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment operating capacities. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
100	3-Cell Cooling Tower	PM	0.5	2.0
101	Lecithin Cooling Tower	PM	0.3	1.1
102	Deodorizer Cooling Tower	PM	0.5	1.9
103	Soy Extraction Cooling Tower	PM	0.5	1.8
104	Rice Bran Extraction Cooling Tower	PM	0.6	2.5
112	Cogen Cooling Tower	PM	0.1	0.3

92. The permittee shall test and record the total dissolved solids content on a quarterly basis for cooling tower SN-112. Results less than 595 ppm total dissolved solids, will demonstrate compliance with requirements in Specific Conditions # 90 and # 91. The results shall be kept on site and made available to Department personnel upon request. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

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# SN-109 Ash Landfill

# Source Description

The facility maintains an area adjacent to the plant for disposal of ash from the TECs unit (not processed in the ash plant).

#### Specific Conditions

- 93. The permittee shall use water and/or non-hazardous chemical sprays as needed or other methods to minimize emissions from the ash landfill. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 94. The permittee shall not operate in a manner such that fugitive emissions from the landfill (such as operation of mobile equipment upon the landfill) and haul roads would cause a nuisance off-site. Under normal conditions, off-site opacity less than or equal to 5% shall not be considered a nuisance. The permittee shall use water sprays or other techniques as necessary to control fugitive emissions. [Regulation 18, §18.501 and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 95. Daily observations of the opacity from the landfill shall be conducted by personnel familiar with the permittee's visible emissions. The permittee shall maintain personnel trained in (but not necessarily certified in) EPA Reference Method 9. If visible emissions are detected, the permittee shall take action to identify the cause of the visible emissions, implement corrective action, and document if visible emissions were present following the corrective action. If visible emissions are still present following the corrective action, the permittee shall document that 'visible emissions do not appear to be in excess of 5% opacity and shall document that visible emissions did not cause a nuisance off-site. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this condition. These records shall be updated weekly, kept on site, and made available to Department personnel upon request. [Regulation 19, §19.503, and 40 CFR Part 52, Subpart E]
  - a. The date and time of the observation:
  - b. If visible emissions were detected;
  - c. If visible emissions were detected, the cause of the visible emissions, the corrective action taken, and if the visible emissions were present following the corrective action:
  - d. If visible emissions were present following the corrective action, document that the visible emissions do not appear to be in excess of 20% opacity and document that the visible emissions do not cause a nuisance off-site; and
  - e. The name of the person conducting the opacity observations.

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## SECTION V: COMPLIANCE PLAN AND SCHEDULE

Riceland Foods, Inc. - Soy Division will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

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#### SECTION VI: PLANTWIDE CONDITIONS

- 1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19, §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19, §19.410(B) and 40 CFR Part 52, Subpart E]
- 3. The permittee must test any equipment scheduled for testing, unless otherwise stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 4. The permittee must provide:
  - a. Sampling ports adequate for applicable test methods;
  - b. Safe sampling platforms;
  - c. Safe access to sampling platforms; and
  - d. Utilities for sampling and testing equipment.

[Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

- 5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 7. The permittee must prepare and implement a Startup, Shutdown, and Malfunction Plan (SSM). If the Department requests a review of the SSM, the permittee will make the SSM available for review. The permittee must keep a copy of the SSM at the source's

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location and retain all previous versions of the SSM plan for five years. [Regulation 19, §19.304 and 40 CFR 63.6(e)(3)]

8. The facility shall not exceed the following throughput rates, in tons of per consecutive 12-month period, at the listed sources. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

SN	Throughput (tons per 12 month period)		
01 - 04, 17, 18, 110, & 111	1,000,000 Combined Throughput Limit***		
15, 16, 76, 77, 90, & 97	1,000,000 Combined Throughput Limit		

<sup>\*\*\*</sup> Total for all receiving sources (SN-01, 02, 03, 04, 17, and 18)

9. The permittee will maintain monthly records to demonstrate compliance with Plantwide Condition 8. The permittee will maintain a twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

#### Title VI Provisions

- 10. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 82, Subpart E]
  - a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
  - b. The placem ent of the required warning statement must comply with the requirements pursuant to §82.108.
  - c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 11. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.

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- c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
- d. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC like appliance" as defined at §82.152)
- e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 12. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 13. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
  - The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC 22 refrigerant.
- 14. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G.

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#### SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated February 5, 2007, February 6, 2007, and February 26, 2008.

Description	Category
SN-84 Bean Cleaner (Closed Loop - No Emission Point)	A-13
850 Gallon Gasoline Tank	A-13
Three (3) Fire Pump Diesel Engines	A-13
25 hp Propane Fired Generator	A-13
Eight (8) Diesel Fuel Tanks (All < 600 Gallon Capacity)	A-3
Phosphoric Acid Tank	B21
Sodium Hydroxide Tank	A4
Trisodium Phosphate Tank	B21
Sulfuric Acid Tank	B21

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#### **SECTION VIII: GENERAL PROVISIONS**

- 1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 CFR 70.6(b)(2)]
- 2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26)]
- 3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation 26, §26.406]
- 4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26, §26.701(A)(2)]
- 5. The permittee must maintain the following records of monitoring information as required by this permit.
  - a. The date, place as defined in this permit, and time of sampling or measurements;
  - b. The date(s) analyses performed;
  - c. The company or entity performing 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.

[40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]

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6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26, §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below:

Arkansas Department of Environmental Quality Air Division ATTN: Compliance Inspector Supervisor 5301 Northshore Drive North Little Rock, AR 72118-5317

[40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

- 8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.
  - a. For all upset conditions (as defined in Regulation19, § 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
    - i. The facility name and location;
    - ii. The process unit or emission source deviating from the permit limit;
    - iii. The permit limit, including the identification of pollutants, from which deviation occurs;
    - iv. The date and time the deviation started;
    - v. The duration of the deviation;
    - vi. The average emissions during the deviation;
    - vii. The probable cause of such deviations;
    - viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future; and
    - ix. The name of the person submitting the report.

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The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Regulation 19, §19.601 and §19.602, Regulation 26, §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]

- 9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), Regulation 26, §26.701(E), and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26, §26.701(F)(1)]
- 11. 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 to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26, §26.701(F)(2)]
- 12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26, §26.701(F)(3)]
- 13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26, §26.701(F)(4)]

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- 14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director 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 must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26, §26.701(F)(5)]
- 15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26, §26.701(G)]
- 16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26, §26.701(H)]
- 17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26, §26.701(I)(1)]
- 18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26, §26.702(A) and (B)]
- 19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26, §26.703(A)]
- 20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26, §26.703(B)]
  - a. Enter upon the permittee's premises where the permitted 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 required 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 this permit; and

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- d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.
- 21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26, §26.703(E)(3)]
  - 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 reporting period established by the monitoring requirements of this permit; and
  - e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.
- 22. Nothing in this permit will alter or affect the following: [Regulation 26, §26.704(C)]
  - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
  - b. The liability of the permittee 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 §408(a) of the Act; or
  - d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.
- 23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 24. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion in the following circumstances:
  - a. Such an extension does not violate a federal requirement;
  - b. The permittee demonstrates the need for the extension; and
  - c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

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[Regulation 18, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

- 25. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Department approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Department may grant such a request, at its discretion under the following conditions:
  - a. Such a request does not violate a federal requirement;
  - b. Such a request is temporary in nature;
  - c. Such a request will not result in a condition of air pollution;
  - d. The request contains such information necessary for the Department to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
  - e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
  - f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[Regulation 18, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

- 26. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion under the following conditions:
  - a. The request does not violate a federal requirement;
  - b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
  - c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

[Regulation 18, §18.102(C-D), Regulation19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

Appendix A
40 CFR 60, Subpart DD – Standards of Performance for Grain Elevators

and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf). The probe and filter holder heating system may be set to provide a gas temperature no greater than 177 ±14 °C (350 ±25 °F), except under the conditions specified in § 60.293(e).

(3) Direct measurement or material balance using good engineering practice shall be used to determine the amount of glass pulled during the performance test. The rate of glass produced is defined as the weight of glass pulled from the affected facility during the performance test divided by the number of hours taken to perform the performance test.

(4) Method 9 and the procedures in §60.11 shall be used to determine opacity.

[54 FR 6674, Feb. 14, 1989; 54 FR 21344, May 17, 1989, as amended at 65 FR 61759, Oct. 17, 2000]

#### Subpart DD—Standards of Performance for Grain Elevators

SOURCE: 43 FR 34347, Aug. 3, 1978, unless otherwise noted.

## § 60.300 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator, except as provided under §60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations.

(b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after August 3, 1978, is subject to the requirements of this part.

[43 FR 34347, Aug. 3, 1978, as amended at 52 FR 42434, Nov. 5, 1988]

#### § 60.301 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

(a) *Grain* means corn, wheat, sorghum, rice, rye, oats, barley, and soybeans.

(b) Grain elevator means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded.

(c) Grain terminal elevator means any grain elevator which has a permanent storage capacity of more than 88,100 m³ (ca. 2.5 million U.S. bushels), except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.

(d) Permanent storage capacity means grain storage capacity which is inside a building, bin, or silo.

(e) Railcar means railroad hopper car or boxcar.

(f) Grain storage elevator means any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant which has a permanent grain storage capacity of 35,200 m³ (ca. 1 million bushels).

(g) Process emission means the particulate matter which is collected by a

capture system.

(h) Fugitive emission means the particulate matter which is not collected by a capture system and is released directly into the atmosphere from an affected facility at a grain elevator.

(i) Capture system means the equipment such as sheds, hoods, ducts, fans, dampers, etc. used to collect particulate matter generated by an affected facility at a grain elevator.

(j) Grain unloading station means that portion of a grain elevator where the grain is transferred from a truck, railcar, barge, or ship to a receiving hop-

(k) Grain loading station means that portion of a grain elevator where the grain is transferred from the elevator to a truck, railcar, barge, or ship.

(1) Grain handling operations include bucket elevators or legs (excluding legs used to unload barges or ships), scale hoppers and surge bins (garners), turn heads, scalpers, cleaners, trippers, and the headhouse and other such structures.

(m) Column dryer means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in one or more continuous packed columns between two perforated metal sheets.

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- (n) Rack dryer means any equipment used to reduce the moisture content of grain in which the grain flows from the top to the bottom in a cascading flow around rows of baffles (racks).
- (o) Unloading leg means a device which includes a bucket-type elevator which is used to remove grain from a barge or ship.

[43 FR 34347, Aug. 3, 1978, as amended at 65 FR 61759, Oct. 17, 2000]

#### § 60.302 Standard for particulate matter.

- (a) On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any gases which exhibit greater than 0 percent opacity from any:
- (1) Column dryer with column plate perforation exceeding 2.4 mm diameter (ca. 0.094 inch).
- (2) Rack dryer in which exhaust gases pass through a screen filter coarser than 50 mesh.
- (b) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility except a grain dryer any process emission which:
- (1) Contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf).
- (2) Exhibits greater than 0 percent opacity.
- (c) On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any fugitive emission from:
- (1) Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.
- (2) Any grain handling operation which exhibits greater than 0 percent opacity.

- (3) Any truck loading station which exhibits greater than 10 percent opacity.
- (4) Any barge or ship loading station which exhibits greater than 20 percent opacity.
- (d) The owner or operator of any barge or ship unloading station shall operate as follows:
- (1) The unloading leg shall be enclosed from the top (including the receiving hopper) to the center line of the bottom pulley and ventilation to a control device shall be maintained on both sides of the leg and the grain receiving hopper.
- (2) The total rate of air ventilated shall be at least 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 ft³/bu).
- (3) Rather than meet the requirements of paragraphs (d)(1) and (2) of this section the owner or operator may use other methods of emission control if it is demonstrated to the Administrator's satisfaction that they would reduce emissions of particulate matter to the same level or less.

#### § 60.303 Test methods and procedures.

- (a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (c) of this section.
- (b) The owner or operator shall determine compliance with the particulate matter standards in \$60.302 as follows:
- (1) Method 5 shall be used to determine the particulate matter concentration and the volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 1.70 dscm (60 dscf). The probe and filter holder shall be operated without heaters.
- (2) Method 2 shall be used to determine the ventilation volumetric flow rate.
- (3) Method 9 and the procedures in §60.11 shall be used to determine opacity.

- (c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section;
- (1) For Method 5, Method 17 may be used.

[54 FR 6674, Feb. 14, 1989]

#### § 60.304 Modifications.

(a) The factor 6.5 shall be used in place of "annual asset guidelines repair allowance percentage," to determine whether a capital expenditure as defined by \$60.2 has been made to an existing facility.

(b) The following physical changes or changes in the method of operation shall not by themselves be considered a modification of any existing facility:

- (1) The addition of gravity loadout spouts to existing grain storage or grain transfer bins.
- (2) The installation of automatic grain weighing scales.
- (3) Replacement of motor and drive units driving existing grain handling equipment.
- (4) The installation of permanent storage capacity with no increase in hourly grain handling capacity.

#### Subpart EE—Standards of Performance for Surface Coating of Metal Furniture

SOURCE: 47 FR 49287, Oct. 29, 1982, unless otherwise noted.

## § 60.310 Applicability and designation of affected facility.

- (a) The affected facility to which the provisions of this subpart apply is each metal furniture surface coating operation in which organic coatings are applied.
- (b) This subpart applies to each affected facility identified in paragraph (a) of this section on which construction, modification, or reconstruction is commenced after November 28, 1980.
- (c) Any owner or operator of a metal furniture surface coating operation that uses less than 3,842 liters of coating (as applied) per year and keeps purchase or inventory records or other data necessary to substantiate annual coating usage shall be exempt from all other provisions of this subpart. These

records shall be maintained at the source for a period of at least 2 years. [47 FR 49287, Oct. 29, 1982, as amended at 50 FR 18248, Apr. 30, 1985]

#### § 60.311 Definitions and symbols.

(a) All terms used in this subpart not defined below are given the meaning in the Act and in subpart A of this part.

Bake oven means a device which uses

heat to dry or cure coatings.

Dip coating means a method of applying coatings in which the part is submerged in a tank filled with the coatings.

Electrodeposition (EDP) means a method of applying coatings in which the part is submerged in a tank filled with the coatings and in which an electrical potential is used to enhance deposition of the coatings on the part.

Electrostatic spray application means a spray application method that uses an electrical potential to increase the transfer efficiency of the coatings.

Flash-off area means the portion of a surface coating operation between the coating application area and bake oven.

Flow coating means a method of applying coatings in which the part is carried through a chamber containing numerous nozzles which direct unatomized streams of coatings from many different angles onto the surface of the part.

Organic coating means any coating used in a surface coating operation, including dilution solvents, from which volatile organic compound emissions occur during the application or the curing process. For the purpose of this regulation, powder coatings are not included in this definition.

Powder coating means any surface coating which is applied as a dry powder and is fused into a continuous coating film through the use of heat.

Spray application means a method of applying coatings by atomizing and directing the atomized spray toward the part to be coated.

Surface coating operation means the system on a metal furniture surface coating line used to apply and dry or cure an organic coating on the surface of the metal furniture part or product.

Appendix B

40 CFR 63, Subpart GGGG - National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production for the soybean extraction process

Citation	Subject	Explanation
§ 63.10(d)(5)(i)	Periodic Startup, Shutdown, and Maifunction Reports.	No, §63.2520(e)(4) and (5) specify the SSM re- porting requirements.
§63.10(d)(5)(ii)	Immediate SSM Reports	No.
§ 63.10(e)(1)	Additional CEMS Reports	Yes.
§ 63.10(e)(2)(i)	Additional CMS Reports	Only for CEMS.
§ 63.10(e)(2)(ii)	Additional COMS Reports	No. Subpart FFFF does not require COMS.
§ 63.10(e)(3)	Reports	No. Reporting requirements are specified in § 63.2520.
§ 63.10(e)(3)(i)-(iii)	Reports	No. Reporting requirements are specified in §63.2520.
§ 63.10(e)(3)(iv)-(v)	Excess Emissions Reports	No. Reporting requirements are specified in § 63.2520.
§ 63.10(e)(3)(iv)-(v)	Excess Emissions Reports	No. Reporting requirements are specified in § 63.2520.
§ 63.10(e)(3)(vi)-(viii)	Excess Emissions Report and Summary Report	No. Reporting requirements are specified in § 63.2520.
§ 63.10(e)(4)	Reporting COMS data	No. Subpart FFFF does not contain opacity or VE limits.
§ 63.10(f)	Waiver for Recordkeeping/Reporting	Yes.
§ 63.11	Flares	Yes.
§63.12	Delegation	Yes.
§ 63.13	Addresses	Yes.
§ 63.14	Incorporation by Reference	Yes.
§ 63.15	Availability of Information	Yes.

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38561, July 1, 2005; 71 FR 20463, Apr. 20, 2006; 71 FR 40341, July 14, 2006]

# Subpart GGGG—National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production

SOURCE: 66 FR 19011, Apr. 12, 2001, unless otherwise noted.

WHAT THIS SUBPART COVERS

## §83.2830 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for emissions during vegetable oil production. This subpart limits hazardous air pollutant (HAP) emissions from specified vegetable oil production processes. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards.

## § 63.2831 Where can I find definitions of key words used in this subpart?

You can find definitions of key words used in this subpart in §63.2872.

#### § 63.2832 Am I subject to this subpart?

(a) You are an affected source subject to this subpart if you meet all of the criteria listed in paragraphs (a)(1) and (2) of this section:

- (1) You own or operate a vegetable oil production process that is a major source of HAP emissions or is collocated within a plant site with other sources that are individually or collectively a major source of HAP emissions.
- (i) A vegetable oil production process is defined in §63.2872. In general, it is the collection of continuous process equipment and activities that produce crude vegetable oil and meal products by removing oil from oilseeds listed in Table 1 to §63.2840 through direct contact with an organic solvent, such as a hexane isomer blend.

(ii) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year.

(2) Your vegetable oil production process processes any combination of eight types of oilseeds listed in paragraphs (a)(2)(i) through (viii) of this section:

- (i) Corn germ;
- (ii) Cottonseed;
- (iii) Flax;
- (iv) Peanut;

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- (v) Rapeseed (for example, canola);
- (vi) Safflower;
- (vii) Soybean; and
- (viii) Sunflower.
- (b) You are not subject to this subpart if your vegetable oil production process meets any of the criteria listed in paragraphs (b)(1) through (4) of this section:
- (1) It uses only mechanical extraction techniques that use no organic solvent to remove oil from a listed oilseed
- (2) It uses only batch solvent extraction and batch desolventizing equipment.
- (3) It processes only agricultural products that are not listed oilseeds as defined in § 63.2872.

- (4) It functions only as a research and development facility and is not a major source.
- (c) As listed in §63.1(c)(5) of the General Provisions, if your HAP emissions increase such that you become a major source, then you are subject to all of the requirements of this subpart.

## §63.2833 Is my source categorized as existing or new?

(a) This subpart applies to each existing and new affected source. You must categorize your vegetable oil production process as either an existing or a new source in accordance with the criteria in Table 1 of this section, as follows:

TABLE 1 TO § 63.2833---CATEGORIZING YOUR SOURCE AS EXISTING OR NEW

If your affected source	And if	Then your affected source
(1) was constructed or began construc- tion before May 26, 2000.	reconstruction has not occurred	is an existing source.
(2) began reconstruction, as defined in § 63.2, on or after May 26, 2000.	<ul> <li>(i) reconstruction was part of a sched- uled plan to comply with the existing source requirements of this subpart; and.</li> </ul>	remains an existing source.
	(li) reconstruction was completed no later than 3 years after the effective date of this subpart.	
(3) began a significant modification, as defined in §63,2872, at any time on an existing source.	the modification does not constitute re- construction,	remains an existing source.
(4) began a significant modification, as defined in § 63.2872, at any time on a new source.	the modification does not constitute re- construction.	remains a new source.
<li>(5) began reconstruction on or after May 26, 2000.</li>	reconstruction was completed later than 3 years after the effective date of this subpart.	is a new source
(6) began construction on or after May 26, 2000.	***************************************	is a new source.

- (b) Reconstruction of a source. Any affected source is reconstructed if components are replaced so that the criteria in the definition of reconstruction in §63.2 are satisfied. In general, a vegetable oil production process is reconstructed if the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost for constructing a new vegetable oil production process, and it is technically and economically feasible for the reconstructed source to meet the relevant new source requirements of this subpart. The effect of reconstruction on the categorization of your existing and new affected source is described in paragraphs (b)(1) and (2) of this section:
- (1) After reconstruction of an existing source, the affected source is recategorized as a new source and becomes subject to the new source requirements of this subpart.
- (2) After reconstruction of a new source, the affected source remains categorized as a new source and remains subject to the new source requirements of this subpart.
- (c) Significant modification of a source. A significant modification to an affected source is a term specific to this subpart and is defined in §63.2872.
- (1) In general, a significant modification to your source consists of adding new equipment or the modification of existing equipment within the affected

source that significantly affects solvent losses from the affected source. Examples include adding or replacing extractors, desolventizer-toasters (conventional and specialty), and meal dryer-coolers. All other significant modifications must meet the criteria listed in paragraphs (c)(1)(i) and (ii) of this section:

(i) The fixed capital cost of the modification represents a significant percentage of the fixed capital cost of building a comparable new vegetable oil production process.

(ii) It does not constitute reconstruction as defined in §63.2.

(2) A significant modification has no effect on the categorization of your

source as existing and new. An existing source remains categorized as an existing source and subject to the existing source requirements of this subpart. A new source remains categorized as a new source and subject to the new source requirements of this subpart.

(d) Changes in the type of oilseed processed by your affected source does not affect the categorization of your source as new or existing. Recategorizing an affected source from existing to new occurs only when you add or modify process equipment within the source which meets the definition of reconstruction.

#### § 63.2834 When do I have to comply with the standards in this subpart?

You must comply with this subpart in accordance with one of the schedules in Table 1 of this section, as follows:

TABLE 1 OF § 63.2834-COMPLIANCE DATES FOR EXISTING AND NEW SOURCES

If your affected source is categorized as	And if	Then your compliance date is	
(a) an existing source	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3 years after the effective date of this subpart.	
(b) a new source	you startup your affected source before the effective date of this subpart.	the effective date of this subpart.	
(c) a new source	you startup your affected source on or after the effective date of this subpart.	your startup date.	

#### STANDARDS

## §63.2840 What emission requirements must I meet?

For each facility meeting the applicability criteria in §63.2832, you must comply with either the requirements specified in paragraphs (a) through (d), or the requirements in paragraph (e) of this section.

(a)(1) The emission requirements limit the number of gallons of HAP lost per ton of listed oilseeds processed. For each operating month, you must

calculate a compliance ratio which compares your actual HAP loss to your allowable HAP loss for the previous 12 operating months as shown in Equation 1 of this section. 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). Equation 1 of this section follows:

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

(2) Equation 1 of this section can also vent loss as shown in Equation 2 of this be expressed as a function of total sol-

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section. Equation 2 of this section follows:

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

#### Where:

f = The weighted average volume fraction of HAP in solvent received during the pre-vious 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 "1" processed during the previous 12 operating months, as shown in §63.2855.

SLF = The corresponding solvent loss factor (gal/ton) for oilseed "1" listed in Table 1 of this section, as follows:

TABLE 1 OF §63.2840-OILSEED SOLVENT LOSS FACTORS FOR DETERMINING ALLOWABLE HAP Loss

Toron of allowed account	A source that	Oilseed solvent loss factor (gel/ton)	
Type of oilseed process	A source that	Existing sources	New sources
(i) Com Germ, Wet Milling	processes corn germ that has been separated from other corn components using a "wel" process of centrituging a sturry steeped in a dilute sulfurous acid solution.	0.4	0.3
(ii) Com Germ, Dry Milling	processes com perm that has been separated from the other com components using a "dry" process of mechanical chafing and air sifting.	0.7	0.7
(iii) Cottonseed, Large	processes 120,000 tons or more of a combination of cottoneed and other listed oilseeds during all normal operating periods in a 12 operating month period.	0.5	0.4
(iv) Cottonseed, Small	processes less than 120,000 tons of a combina- tion of cottonseed and other listed oilseeds dur- ing all normal operating periods in a 12 oper- ating month period.	0.7	0.4
(v) Flax	processes flax	0.6	0.6
(vi) Peanuts	processes paanuts	1.2	0.7
(vii) Rapeseed	processes rapeseed	0.7	0.3
(viii) Safflower	processes safflower	0.7	0.7
(ix) Soybean, Conventional	uses a conventional style desolventizer to produce crude soybean oil products and soybean animal feed products.	0.2	0.2
(x) Soybean, Specialty	uses a special style desolventizer to produce soy- bean meal products for human and animal con- aumption.	1.7	1.5
(xi) Soybean, Combination Plant with Low Specialty Production.	processes soybeans in both specialty and conven- tional desolventizers and the quantity of soy- beans processed in specialty desolventizers dur- ing normal operating periods is less than 3.3 percent of total soybeans processed during all normal operating periods in a 12 operating month period. The corresponding solvent loss factor is an overall value and applies to the total quantity of soybeans processed.	0.25	0.25
(xii) Sunflower	processes sunflower	0.4	0.3

(b) When your source has processed calculate the compliance ratio by the listed oilseed for 12 operating months, end of each calendar month following an operating month using Equation 2 of this section. When calculating your compliance ratio, consider the conditions and exclusions in paragraphs (b) (1) through (6) of this section:

(1) If your source processes any quantity of listed oilseeds in a calendar month and the source is not operating under an initial startup period or malfunction period subject to \$63.2850, then you must categorize the month as an operating month, as defined in \$63.2872.

(2) 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.

(3) If your source shuts down and processes no listed oilseed for an entire calendar month, then you must categorize the month as a nonoperating month, as defined in §63.2872. Exclude any nonoperating months from the compliance ratio determination.

(4) If your source is subject to an initial startup period as defined in §63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the

initial startup period.

(5) If your source is subject to a malfunction period as defined in §63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the malfunction

period.

(6) For sources processing cottonseed or specialty soybean, the solvent loss factor you use to determine the compliance ratio may change each operating month depending on the tons of oilseed processed during all normal operating periods in a 12 operating month period.

(c) If the compliance ratio is less than or equal to 1.00, your source was in compliance with the HAP emission requirements for the previous oper-

ating month.

(d) To determine the compliance ratio in Equation 2 of this section, you must select the appropriate oilseed solvent loss factor from Table 1 of this section. First, determine whether your source is new or existing using Table 1 of §63.2833. Then, under the appropriate existing or new source column, select the oilseed solvent loss factor that cor-

responds to each type oilseed or process operation for each operating month.

(e) Low-HAP solvent option. For all vegetable oil production processes subject to this subpart, you must exclusively use solvent where the volume fraction of each HAP comprises 1 percent or less by volume of the solvent (low-HAP solvent) in each delivery, and you must meet the requirements in paragraphs (e)(1) through (5) of this section. Your vegetable oil production process is not subject to the requirements in §§63.2850 through 63.2870 unless specifically referenced in paragraphs (e)(1) through (5) of this section.

(1) You shall determine the HAP content of your solvent in accordance with the specifications in §63.2854(b)(1).

(2) You shall maintain documentation of the HAP content determination for each delivery of the solvent at the facility at all times.

(3) You must submit an initial notification for existing sources in accordance with §63.2860(a).

(4) You must submit an initial notification for new and reconstructed sources in accordance with §63.2860(b).

(5) You must submit an annual compliance certification in accordance with \$63.2861(a). The certification should only include the information required under \$63.2861(a)(1) and (2), and a certification indicating whether the source complied with all of the requirements in paragraph (e) of this section.

(f) You may change compliance options for your source if you submit a notice to the Administrator at least 60 days prior to changing compliance options. If your source changes from the low-HAP solvent option to the compliance ratio determination option, you must determine the compliance ratio for the most recent 12 operating months beginning with the first month after changing compliance options.

[66 FR 19011, Apr. 12, 2001, as amended at 69 FR 53341, Sept. 1, 2004]

#### COMPLIANCE REQUIREMENTS

## §63.2850 How do I comply with the hazardous air pollutant emission standards?

(a) General requirements. The requirements in paragraphs (a)(i)(i) through

- (iv) of this section apply to all affected sources:
- (1) Submit the necessary notifications in accordance with §63.2860, which include:
- (i) Initial notifications for existing sources.
- (ii) Initial notifications for new and reconstructed sources.
- (iii) Initial notifications for significant modifications to existing or new sources.
- (iv) Notification of compliance status.
- (2) Develop and implement a plan for demonstrating compliance in accordance with §63.2851.
- (3) Develop a written startup, shutdown and malfunction (SSM) plan in accordance with the provisions in §63,2852.
- (4) Maintain all the necessary records you have used to demonstrate compliance with this subpart in accordance with §63.2862.
- (5) Submit the reports in paragraphs (a)(5)(i) through (iii) of this section:
- (i) Annual compliance certifications in accordance with §63.2861(a).
- (ii) Periodic SSM reports in accordance with §63.2861(c).
- (iii) Immediate SSM reports in accordance with §63.2861(d).
- (6) Submit all notifications and reports and maintain all records required by the General Provisions for performance testing if you add a control device that destroys solvent.
- (b) Existing sources under normal operation. You must meet all of the requirements listed in paragraph (a) of this section and Table I of this section for sources under normal operation, and the schedules for demonstrating compliance for existing sources under normal operation in Table 2 of this section.
- (c) New sources. Your new source, including a source that is categorized as new due to reconstruction, must meet the requirements associated with one of two compliance options. Within 15 days of the startup date, you must choose to comply with one of the options listed in paragraph (c)(1) or (2) of this section:
- (1) Normal operation. Upon startup of your new source, you must meet all of the requirements listed in §63.2850(a)

and Table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for new sources under normal operation in Table 2 of this section.

- (2) Initial startup period. For up to 6 calendar months after the startup date of your new source, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating under an initial startup period, and the schedules for demonstrating compliance for new sources operating under an initial startup period in Table 2 of this section. After a maximum of 6 calendar months, your new source must then meet all of the requirements listed in Table 1 of this section for sources under normal operation.
- (d) Existing or new sources that have been significantly modified. Your existing or new source that has been significantly modified must meet the requirements associated with one of two compliance options. Within 15 days of the modified source startup date, you must choose to comply with one of the options listed in paragraph (d)(1) or (2) of this section:
- (1) Normal operation. Upon startup of your significantly modified existing or new source, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for an existing or new source that has been significantly modified in Table 2 of this section.
- (2) Initial startup period. For up to 3 calendar months after the startup date of your significantly modified existing or new source, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating under an initial startup period, and the schedules for demonstrating compliance for a significantly modified existing or new source operating under an initial startup period in Table 2 of this section. After a maximum of 3 calendar months, your new or existing source must meet all of the requirements listed in Table 1 of this section for sources under normal operation.
- (e) Existing or new sources experiencing a malfunction. A malfunction is defined

in §63.2. In general, it means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or process equipment to function in a usual manner, If your existing or new source experiences an unscheduled shutdown as a result of a malfunction, continues to operate during a malfunction (including the period reasonably necessary to correct the malfunction), or starts up after a shutdown resulting from a malfunction, then you must meet the requirements associated with one of two compliance options. Routine or scheduled process startups and shutdowns resulting from, but not limited to, market demands, maintenance activities, and switching types of oilseed processed, are not startups or shutdowns resulting from a malfunction and, therefore, do not qualify for this provision. Within 15 days of the beginring date of the malfunction, you must choose to comply with one of the options listed in paragraphs (e)(1) through (2) of this section:

- (1) Normal operation. Your source must meet all of the requirements listed in paragraph (a) of this section and one of the options listed in paragraphs (e)(1)(i) through (iii) of this section:
- (i) Existing source normal operation requirements in paragraph (b) of this section.
- (ii) New source normal operation requirements in paragraph (c)(l) of this section.
- (iii) Normal operation requirements for sources that have been significantly modified in paragraph (d)(i) of this section.
- (2) Malfunction period. Throughout the malfunction period, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating during a malfunction period. At the end of the malfunction period, your source must then meet all of the requirements listed in Table 1 of this section for sources under normal operation. Table 1 of this section follows:

TABLE 1 OF § 63.2850-REQUIREMENTS FOR COMPLIANCE WITH HAP EMISSION STANDARDS

Are you required to For periods of normal operation?		For initial startup periods sub- ject to § 63.2850(c)(2) or (d)(2)?	For malfunction periods sub- ject to § 63.2850(e)(2)?	
(a) Operate and maintain your source in accordance with general duty provisions of § 63.6(e)?.	Yes. Additionally, the HAP emission limits will apply.	Yes, you are required to mini- mize emissions to the ex- tent practible throughout the initial startup period. Such measures should be described in the SSM plan.	Yes, you are required to minimize emissions to the extent practible throughout the initial startup period. Such meesures should be described in the SSM plan.	
(b) Determine and record the extraction solvent loss in gal- lons from your source?.	Yes, as described in § 63.2853.	Yes, as described in § 63.2862(e).	Yes, as described in § 63.2862(e).	
(c) Record the volume fraction of HAP present at greater than 1 percent by volume and gallons of extraction sol- vent in shipment received?.	Yes	Yes	Yes.	
(d) Determine and record the tons of each oilseed type processed by your source?.	Yes, as described in § 63.2855.	No	No.	
(e) Determine the weighted average volume traction of HAP in extraction solvent received as described in § 63.2864 by the end of the following calendar month?.	Yes	No. Except for solvent re- ceived by a new or recon- structed source com- mencing operation under an initial startup period, the HAP volume fraction in any solvent received during an initial startup period is in- ctuded in the weighted av- erage HAP determination for the next operating month.	No, the HAP volume fraction in any solvent received during a maifunction period is included in the weighted average HAP determination for the next operating month.	

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Table 1 of § 63.2850—Requirements for Compliance with HAP Emission Standards—Continued

Are you required to	For periods of normal oper- ation?	For initial startup periods subject to § 63.2850(c)(2) or (d)(2)?	For malfunction periods subject to § 63.2850(e)(2)?	
(f) Determine and record the actual solvent loss, weighted average volume fraction HAP, oilseed processed and compliance ratio for each 12 operating month period as described in § 63.2840 by the and of the following cal- ender month?	Yes,	No, these requirements are not applicable because your source is not required to determine the compli- ance ratio with data re- corded for an initial startup period.	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for a malfunction period.	
(g) Submit a Notification of Compliance Status or An- nual Compliance Certifi- cation as appropriate?.	Yes, as described in §§ 63.2860(d) and 63.2861(a).	No. However, you may be required to submit an annual compliance cartification for previous operating months, if the deadline for the annual compliance certification happens to occur during the initial startup period.	No. However, you may be re- quired to submit an annual compliance certification for previous operating months, if the deadline for the an- nual compliance certifi- cation happens to occur during the mainfunction pe- riod.	
(h) Submit a Deviation Notifica- tion Report by the end of the calendar month following the month in which you deter- mined that the compliance ratio exceeds 1.00 as de- scribed in § 63.2881(b)?.	Yes	No, these requirements are not applicable because your source is not required to determine the compli- ance ratio with data re- corded for an initial startup period.	No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for a malfunction period.	
(i) Submit a Periodic SSM Re- port as described in \$63,2861(c)?.	No, a SSM activity is not cat- egorized as normal oper- ation.	Yes	Yes.	
(i) Submit an Immediate SSM Report as described in § 63,2861(d)?.	No, a SSM activity is not cal- egorized as normal oper- ation.	Yes, only if your source does not follow the SSM plan.	Yes, only if your source does not follow the SSM plan.	

TABLE 2 OF § 63.2850—SCHEDULES FOR DEMONSTRATING COMPLIANCE UNDER VARIOUS SOURCE OPERATING MODES

If your source is	and is operating under.	then your record- keeping schedule	You must determine your first compliance ratio by the end of the calendar month following	Base your first compli- ance ratio on informa- tion recorded
(a) Existing	Normal operation	Begins on the compli- ance date.	The first 12 operating months after the compliance date.	During the first 12 oper- ating months after the compliance date.
(b) New	(1) Normal operation	Begins on the startup date of your new source.	The first 12 operating months after the startup date of the new source.	During the first 12 oper- ating months after the startup date of the new source.
	(2) An initial startup period.	Begins on the startup date of your new source.	The first 12 operating months after termination of the initial startup period, which can last for up to 6 months.	During the first 12 oper- ating months after the initial startup pe- riod, which can last for up to 6 months.
<ul><li>(c) Existing or new that has been significantly modified.</li></ul>	(1) Normal operation	Resumes on the start- up date of the modi- fied source.	The first operating month efter the start- up date of the modi- fled source.	Ouring the previous 11 operating months prior to the significant modification and the first operating month following the initial startup date of the source.

TABLE 2 OF § 63.2850—SCHEDULES FOR DEMONSTRATING COMPLIANCE UNDER VARIOUS SOURCE OPERATING MODES—Continued

If your source is	and is operating under	then your record- keeping schedule.	You must determine your first compliance ratio by the end of the calendar month following	Base your first compli- ance ratio on informe- tion recorded ,
	(2) An initial startup period.	Resumes on the start- up date of the modi- fied source.	The first operating month after termination of the initial startup period, which can lest up to 3 months.	During the 11 operating months before the significant modification and the first operating month after the initial startup period.

[66 FR 19011, Apr. 12, 2001, as amended at 71 FR 20463, Apr. 20, 2006]

## § 63.2851 What is a plan for demonstrating compliance?

(a) You must develop and implement a written plan for demonstrating compliance that provides the detailed procedures you will follow to monitor and record data necessary for demonstrating compliance with this subpart. Procedures followed for quantifying solvent loss from the source and amount of oilseed processed vary from source to source because of site-specific factors such as equipment design characteristics and operating conditions. Typical procedures include one or more accurate measurement methods such as weigh scales, volumetric displacement, and material mass balances. Because the industry does not have a uniform set of procedures, you must develop and implement your own site-specific plan for demonstrating compliance before the compliance date for your source. You must also incorporate the plan for demonstrating compliance by reference in the source's title V permit and keep the plan onsite and readily available as long as the source is operational. If you make any changes to the plan for demonstrating compliance, then you must keep all previous versions of the plan and make them readily available for inspection for at least 5 years after each revision. The plan for demonstrating compliance must include the items in paragraphs (a)(1) through (7) of this section:

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

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

- (3) A detailed description of all methods of measurement your source will use to determine your solvent losses, HAP content of solvent, and the tons of each type of oilseed processed.
- (4) When each measurement will be made.
- (5) Examples of each calculation you will use to determine your compliance status. Include examples of how you will convert data measured with one parameter to other terms for use in compliance determination.
- (6) Example logs of how data will be recorded.
- (7) A plan to ensure that the data continue to meet compliance demonstration needs.
- (b) The responsible agency of these NESHAP may require you to revise your plan for demonstrating compliance. The responsible agency may require reasonable revisions if the procedures lack detail, are inconsistent or do not accurately determine solvent loss, HAP content of the solvent, or the tons of oilseed processed.

## §63.2852 What is a startup, shutdown, and malfunction plan?

You must develop a written SSM plan in accordance with \$63.6(e)(3). You must complete the SSM plan before the compliance date for your source. You must also keep the SSM plan on-site and readily available as long as the source is operational. The SSM plan provides detailed procedures for operating and maintaining your source to minimize emissions during a qualifying SSM event for which the source chooses the \$63.2850(e)(2) maifunction 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 best practices now in use by the industry to minimize emissions. Some or all of the procedures may come from plans you developed for other purposes such as a Standard Operating Procedure manual or an Occupational Safety and Health Administration Process Safety Management plan. To qualify as a SSM plan, other such plans must meet all the applicable requirements of these NESHAP.

[66 FR 19011, Apr. 12, 2001, as amended at 67 FR 16321, Apr. 5, 2002; 71 FR 20463, Apr. 20,

## § 63.2853 How do I determine the actual solvent loss?

By the end of each calendar month following an operating month, you must determine the total solvent loss in gallons for the previous operating month. The total solvent loss for an operating month includes all solvent losses that occur during normal operating periods within the operating month. If you have determined solvent losses for 12 or more operating months, then you must also determine the 12 operating months rolling sum of actual solvent loss in gallons by summing the monthly actual solvent loss for the previous 12 operating months. The 12 operating months rolling sum of solvent loss is the "actual solvent loss, which is used to calculate your compliance ratio as described in §63.2840.

(a) To determine the actual solvent loss from your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs (a)(1) through (7) of this section:

(1) The dates that define each operating status period during a calendar month. The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If the source maintains the same operating status during an entire calendar month, these dates are the beginning and ending dates of the calendar month. If, prior to the effective date of this rule, your source determines the solvent loss on an accounting month, as defined in §63.2872, rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the accounting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP.

(2) Source operating status. You must categorize the operating status of your source for each recorded time interval in accordance with criteria in Table 1 of this section, as follows:

TABLE 1 OF §63.2853—CATEGORIZING YOUR SOURCE OPERATING STATUS

If during a recorded time interval	then your source operating status is
<ul> <li>Your source processes any amount of listed disset and source is not operating under an initial startup operating per- riod or a mathunction period subject to § 63.2850(c)(2), (d)(2), or (e)(2).</li> </ul>	A normal operating period.
(ii) Your source processes no agricultural product and your source is not operating under an initial startup period or mal- function period subject to § 63.2850(c)(2), (d)(2), or (e)(2).	A nonoperating period.
(iii) You choose to operate your source under an initial startup period subject to § 63.2850(c)(2) or (d)(2).	An initial startup period.
(iv) You choose to operate your source under a malfunction period subject to § 63.2850(a)(2).	A malfunction period.
(v) Your source processes agricultural products not defined as listed oilseed.	An exempt period.

(3) Measuring the beginning and ending measure and record the solvent invensolvent inventory. You are required to

tory on the beginning and ending dates

of each normal operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in §63.2851, to determine the extraction solvent inventory, and maintain readily available records of the actual solvent loss inventory, as described in §63.2862(c)(1). In general, you must measure and record the solvent inventory only when the source is actively processing any type of agricultural product. When the source is not active, some or all of the solvent working capacity is transferred to solvent storage tanks which can artificially inflate the solvent inventory.

(4) Gallons of extraction solvent received. Record the total gallons of extraction solvent received in each shipment. For most processes, the gallons of solvent received represents purchases of delivered solvent added to the solvent storage inventory. However, if your process refines additional vegetable oil from off-site sources, recovers solvent from the off-site oil, and adds it to the on-site solvent inventory, then you must determine the quantity of recovered solvent and include it in the gallons of extraction solvent received.

(5) Solvent inventory adjustments. In some situations, solvent losses determined directly from the measured solvent inventory and quantity of solvent received is not an accurate estimate of the "actual solvent loss" for use in determining compliance ratios. In such cases, you may adjust the total solvent loss for each normal operating period as long as you provide a reasonable justification for the adjustment. Situations that may require adjustments of the total solvent loss include, but are not limited to, situations in paragraphs (a)(5)(i) and (ii) of this section:

(i) Solvent destroyed in a control device. You may use a control device to reduce solvent emissions to meet the emission standard. The use of a control device does not alter the emission limit for the source. If you use a control device that reduces solvent emissions through destruction of the solvent instead of recovery, then determine the gallons of

solvent that enter the control device and are destroyed there during each normal operating period. All solvent destroyed in a control device during a normal operating period can be subtracted from the total solvent loss. Examples of destructive emission control devices include catalytic incinerators, boilers, or flares. Identify and describe, in your plan for demonstrating compliance, each type of reasonable and sound measurement method that you use to quantify the gallons of solvent entering and exiting the control device and to determine the destruction efficiency of the control device. You may use design evaluations to document the gallons of solvent destroyed or removed by the control device instead of performance testing under §63.7. The design evaluations must be based on the procedures and options described in §63.985(b)(1)(i)(A) through (C) or §63.11, as appropriate. All data, assumptions, and procedures used in such evaluations must be documented and available for inspection. If you use performance testing to determine solvent flow rate to the control device or destruction efficiency of the device, follow the procedures as outlined in §63.997(e)(1) and (2). Instead of periodic performance testing to demonstrate continued good operation of the control device, you may develop a monitoring plan, following the procedures outlined in §63.988(c) and using operational parametric measurement devices such as fan parameters, percent measurements of lower explosive limits, and combustion temperature.

(ii) Changes in solvent working capacity. In records you keep on-site, document any process modifications resulting in changes to the solvent working capacity in your vegetable oil production process. Solvent working capacity is defined in §63.2872. In general, solvent working capacity is the volume of solvent normally retained in solvent recovery equipment such as the extractor, desolventizer-toaster, solvent storage, working tanks, mineral oil absorber, condensers, and oil/solvent distillation system. If the change occurs during a normal operating period, you must determine the difference in working solvent volume and make a one-

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time documented adjustment to the solvent inventory.

(b) Use Equation 1 of this section to determine the actual solvent loss oc-

curring from your affected source for all normal operating periods recorded within a calendar month. Equation 1 of this section follows:

$$\begin{array}{c} \text{Monthly Actual} \\ \text{Solvent} \\ \text{(gal)} \end{array} = \sum_{i=1}^{n} \left( \text{SOLV}_{B} - \text{SOLV}_{E} + \text{SOLV}_{R} \pm \text{SOLV}_{A} \right)_{i} \qquad \text{(Eq. 1)} \end{array}$$

Where:

SOLV<sub>B</sub> = Gallons of solvent in the inventory at the beginning of normal operating period "i" as determined in paragraph (a)(3) of this section.

SOLV<sub>E</sub> = Gallons of solvent in the inventory at the end of normal operating period "i" as determined in paragraph (a)(3) of this section.

SOLV<sub>R</sub> = Gallons of solvent received between the beginning and ending inventory dates of normal operating period "I" as determined in paragraph (a)(4) of this section.

SOLV<sub>A</sub> = Gallons of solvent added or removed from the extraction solvent inventory during normal operating period "i" as determined in paragraph (a)(5) of this section.

n = Number of normal operating periods in a calendar month.

(c) The actual solvent loss is the total solvent losses during normal operating periods for the previous 12 op-erating months. You determine your actual solvent loss by summing the monthly actual solvent losses for the previous 12 operating months. You must record the actual solvent loss by the end of each calendar month following an operating month. Use the actual solvent loss in Equation 2 of §63.2840 to determine the compliance ratio. Actual solvent loss does not include losses that occur during operating status periods listed in paragraphs (c)(1) through (4) of this section. If any one of these four operating status periods span an entire month, then the month is treated as nonoperating and there is no compliance ratio determination.

(1) Nonoperating periods as described in paragraph (a)(2)(ii) of this section.

(2) Initial startup periods as described in §63.2850(c)(2) or (d)(2).

(3) Malfunction periods as described in §63.2850(e)(2).

(4) Exempt operation periods as described in paragraph (a)(2)(v) of this section.

## § 63.2854 How do I determine the weighted average volume fraction of HAP in the actual solvent loss?

(a) This section describes the information and procedures you must use to determine the weighted average volume fraction of HAP in extraction solvent received for use in your vegetable oil production process. By the end of each calendar month following an operating month, determine the weighted average volume fraction of HAP in extraction solvent received since the end of the previous operating month. If you have determined the monthly weighted average volume fraction of HAP in solvent received for 12 or more operating months, then also determine an overall weighted average volume fraction of in solvent received for the previous 12 operating months. Use the volume fraction of HAP determined as a 12 operating months weighted average in Equation 2 of §63.2840 to determine the compliance ratio.

(b) To determine the volume fraction of HAP in the extraction solvent determined as a 12 operating months weighted average, you must comply with paragraphs (b)(1) through (3) of this section:

(1) Record the volume fraction of each HAP comprising more than 1 percent by volume of the solvent in each delivery of solvent, including solvent recovered from off-site oil. To determine the HAP content of the material in each delivery of solvent, the reference method is EPA Method 311 of appendix A of this part. You may use EPA Method 311, an approved alternative method, or any other reasonable

means for determining the HAP content. Other reasonable means of determining HAP content include, but are not limited to, a material safety data sheet or a manufacturer's certificate of analysis. A certificate of analysis is a legal and binding document provided by a solvent manufacturer. The purpose of a certificate of analysis 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 I percent by volume. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. However, if the results of an analysis by EPA Method 311 are different from the HAP content determined by an-

other means, the EPA Method 311 results will govern compliance determinations.

(2) Determine the weighted average volume fraction of HAP in the extraction solvent each operating month. The weighted average volume fraction of HAP for an operating month includes all solvent received since the end of the last operating month, regardless of the operating status at the time of the delivery. Determine the monthly weighted average volume fraction of HAP by summing the products of the HAP volume fraction of each delivery and the volume of each delivery and dividing the sum by the total volume of all deliveries as expressed in Equation 1 of this section. Record the result by the end of each calendar month following an operating month. Equation 1 of this section follows:

Where:

Received; = Gallons of extraction solvent received in delivery "i."

ceived in delivery "1."

Content; = The volume fraction of HAP in extraction solvent delivery "1."

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

n = Number of extraction solvent deliveries since the end of the previous operating month.

(3) Determine the volume fraction of HAP in your extraction solvent as a 12 operating months weighted average.

When your source has processed oilseed for 12 operating months, sum the products of the monthly weighted average HAP volume fraction and corresponding volume of solvent received, and divide the sum by the total volume of solvent received for the 12 operating months, as expressed by Equation 2 of this section. Record the result by the end of each calendar month following an operating month and use it in Equation 2 of §63.2840 to determine the compliance ratio. Equation 2 of this section follows:

Where:

Received, = Gallons of extraction solvent received in operating month "i" as determined in accordance with §63.2853(a)(4).

Content: - Average volume fraction of HAP in extraction solvent received in operating month "i" as determined in accordance with paragraph (b)(1) of this section.

Total Received - Total gallons of extraction

Total Received — Total gallons of extraction solvent received during the previous 12 operating months.

## § 63.2855 How do I determine the quantity of oilseed processed?

All oilseed measurements must be determined on an as received basis, as defined in §63.2872. The as received basis refers to the oilseed chemical and physical characteristics as initially received by the source and prior to any oilseed handling and processing. By the end of each calendar month following an operating month, you must determine the tons as received of each listed oilseed processed for the operating month. The total oilseed processed for an operating month includes the total of each oilseed processed during all normal operating periods that occur within the operating month. If you have determined the tons of oilseed processed for 12 or more operating months, then you must also determine the 12 operating months rolling sum of each type oilseed processed by summing the tons of each type of oilseed processed for the previous 12 operating months. The 12 operating months rolling sum of each type of oilseed processed is used to calculate the compliance ratio as described in §63.2840.

(a) To determine the tons as received of each type of oilseed processed at your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs (a)(1) through (5) of this section:

(1) The dates that define each operating status period. The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If, prior to the effective date of this rule, your source determines the oilseed inventory on an accounting month rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the ac-

counting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP. The dates on each oilseed inventory log must be consistent with the dates recorded for the solvent inventory.

(2) Source operating status. You must categorize the source operation for each recorded time interval. The source operating status for each time interval recorded on the oilseed inventory for each type of oilseed must be consistent with the operating status recorded on the solvent inventory logs

as described in §63.2853(a)(2).

(3) Measuring the beginning and ending inventory for each oilseed. You are required to measure and record the oilseed inventory on the beginning and ending dates of each normal operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in §63.2851, to determine the oilseed inventory on an as received basis and maintain readily available records of the oilseed inventory as described by §63.2862(c)(3).

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

added to your on-site storage.

(5) Oilseed inventory adjustments. 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. For example, spoiled and molded oilseed removed from storage but not processed by your source will result in an overestimate of the quantity of oilseed processed. In such cases, you must adjust the oilseed inventory and provide a justification for the adjustment. Situations that may require oilseed inventory adjustments

include, but are not limited to, the situations listed in paragraphs (a)(5)(i) through (v) of this section:

(i) Oilseed that mold or otherwise become unsuitable for processing.

(ii) Oilseed you sell before it enters

the processing operation.
(iii) Oilseed destroyed by an event such as a process malfunction, fire, or natural disaster.

(iv) 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.

(v) Periodic physical measurements f inventory. For example, some of inventory. For example, some sources periodically empty oilseed storage silos to physically measure the current oilseed inventory. This periodic measurement procedure typically results in a small inventory correction. The correction factor, usually less than I percent, may be used to make an adjustment to the source's oilseed inventory that was estimated previously with indirect measurement techniques. To make this adjustment, your plan for demonstrating compliance must provide for such an adjustment.

(b) Use Equation 1 of this section to determine the quantity of each oilseed type processed at your affected source during normal operating periods recorded within a calendar month. Equation 1 of this section follows:

Monthly Quantity of Each Oilseed Processed (tons) 
$$= \sum_{n=1}^{n} (SEED_B - SEED_E + SEED_R \pm SEED_A)$$
 (Eq. 1)

SEEDs = Tons of oilseed in the inventory at the beginning of normal operating period "i" as determined in accordance with paragraph (a)(3) of this section. SEED<sub>E</sub> = Tons of oilseed in the inventory at

the end of normal operating period "i determined in accordance with paragraph (a)(3) of this section.

SEED<sub>R</sub> = Tons of oilseed received during normal operating period "i" as determined in accordance with paragraph (a)(4) of this

section.

SEED<sub>A</sub> = Tons of oilseed added or removed from the oilseed inventory during normal operating period "i" as determined in accordance with personanh (a)(5) of this sections. cordance with paragraph (a)(5) of this sec-

 n = Number of normal operating periods in the calendar month during which this type oilseed was processed.

(c) The quantity of each oilseed processed is the total tons of each type of listed oilseed processed during normal operating periods in the previous 12 operating months. You determine the tons of each oilseed processed by summing the monthly quantity of each oilseed processed for the previous 12 operating months. You must record the 12 operating months quantity of each type of oilseed processed by the end of each calendar month following an operating month. Use the 12 operating months quantity of each type of oilseed processed to determine the compliance ratio as described in §63.2840. The quantity of oilseed processed does not include oilseed processed during the operating status periods in paragraphs (c)(1) through (4) of this section:

(1) Nonoperating periods as described in § 63.2853 (a) (2) (ii).

(2) Initial startup periods as described in §63.2850(c)(2) or (d)(2).

(3) Malfunction periods as described in §63.2850(e)(2).

(4) Exempt operation periods as described in §63.2853 (a)(2)(v).

(5) If any one of these four operating status periods span an entire calendar month, then the calendar month is treated as a nonoperating month and there is no compliance ratio determination.

NOTIFICATIONS, REPORTS, AND RECORDS

#### §63.2860 What notifications must I submit and when?

You must submit the one-time notifications listed in paragraphs (a) through (d) of this section to the responsible agency:

(a) Initial notification for existing sources. For an existing source, submit an initial notification to the agency responsible for these NESHAP no later than 120 days after the effective date of this subpart. In the notification, include the items in paragraphs (a)(1) through (5) of this section:

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

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

(3) Identification of the relevant standard, such as the vegetable oil production NESHAP, and compliance date.

- (4) A brief description of the source including the types of listed oilseeds processed, nominal operating capacity, and type of desolventizer(s) used.
- (5) A statement designating the source as a major source of HAP or a demonstration that the source meets the definition of an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
- (b) Initial notifications for new and reconstructed sources. New or reconstructed sources must submit a series of notifications before, during, and after source construction per schedule listed in §63.9. The information requirements for the notifications are the same as those listed in the General Provisions with the exceptions listed in paragraphs (b)(1) and (2) of this section:
- (1) The application for approval of construction does not require the specific HAP emission data required in §63.5(d)(1)(ii)(H) and (iii), (d)(2) and (d)(3)(ii). The application for approval of construction would include, instead, a brief description of the source including the types of listed oilseeds processed, nominal operating capacity, and type of desolventizer(s) used.

(2) The notification of actual startup date must also include whether you have elected to operate under an initial startup period subject to §63.2850(c)(2) and provide an estimate and justification for the anticipated duration of the

initial startup period.

(c) Significant modification notifications. Any existing or new source that plans to undergo a significant modification as defined in §63.2872 must submit two reports as described in paragraphs (c)(1) and (2) of this section:

(1) Initial notification. You must submit an initial notification to the agency responsible for these NESHAP 30 days prior to initial startup of the significantly modified source. The initial notification must demonstrate that the proposed changes qualify as a significant modification. The initial notification must include the items in paragraphs (c)(1)(i) and (ii) of this section:

(i) The expected startup date of the

modified source.

- (ii) A description of the significant modification including a list of the equipment that will be replaced or modified. If the significant modification involves changes other than adding Or replacing extractors. desolventizer-toasters (conventional and specialty), and meal dryer-coolers, then you must also include the fixed capital cost of the new components, expressed as a percentage of the fixed capital cost to build a comparable new vegetable oil production process; supporting documentation for the cost estimate; and documentation that the proposed changes will significantly affect solvent losses.
- (2) Notification of actual startup. You must submit a notification of actual startup date within 15 days after initial startup of the modified source. The notification must include the items in paragraphs (c)(2)(i) through (iv) of this section:
- (i) The initial startup date of the modified source.
- (ii) An indication whether you have elected to operate under an initial startup period subject to §63.2850(d)(2).

(iii) The anticipated duration of any

initial startup period.

- (iv) A justification for the anticipated duration of any initial startup period.
- (d) Notification of compliance status. As an existing, new, or reconstructed source, you must submit a notification of compliance status report to the responsible agency no later than 60 days after determining your initial 12 operating months compliance ratio. If you are an existing source, you generally must submit this notification no later

than 50 calendar months after the effective date of these NESHAP (36 calendar months for compliance, 12 operating months to record data, and 2 calendar months to complete the report). If you are a new or reconstructed source, the notification of compliance status is generally due no later than 20 calendar months after initial startup (6 calendar months for the initial startup period, 12 operating months to record data, and 2 calendar months to complete the report). The notification of compliance status must contain the items in paragraphs (d)(1) through (6) of this section:

- (1) The name and address of the owner or operator.
- (2) The physical address of the vegetable oil production process.
- (3) Each listed oilseed type processed during the previous 12 operating months.
- (4) Each HAP identified under §63.2854(a) as being present in concentrations greater than I percent by volume in each delivery of solvent received during the 12 operating months period used for the initial compliance determination.
- (5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
- (6) A compliance certification indicating whether the source complied with all of the requirements of this subpart throughout the 12 operating months used for the initial source compliance determination. This certification must include a certification of the items in paragraphs (d)(6)(i) through (iii) of this section:
- (i) The plan for demonstrating compliance (as described in §63.2851) and SSM plan (as described in §63.2852) are complete and available on-site for inspection.
- (ii) You are following the procedures described in the plan for demonstrating compliance.
- (iii) The compliance ratio is less than or equal to 1.00.

### §63.2861 What reports must I submit and when?

After the initial notifications, you must submit the reports in paragraphs (a) through (d) of this section to the agency responsible for these NESHAP at the appropriate time intervals:

- (a) Annual compliance certifications. The first annual compliance certification is due 12 calendar months after you submit the notification of compliance status. 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 months period ending 60 days prior to the date on which the report is due. Include the information in paragraphs (a)(1) through (6) of this section in the annual certification:
- (i) The name and address of the owner or operator.
- (2) The physical address of the vegetable oil production process.
- (3) Each listed oilseed type processed during the 12 calendar months period covered by the report.
- (4) Each HAP identified under \$63.2854(a) as being present in concentrations greater than I percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report.
- (5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
- (6) A compliance certification to indicate whether the source was in compliance for each compliance determination made during the 12 calendar months period covered by the report. For each such compliance determination, you must include a certification of the items in paragraphs (a)(6)(i) through (ii) of this section:
- (i) You are following the procedures described in the plan for demonstrating compliance.
- (ii) The compliance ratio is less than or equal to 1.00.

- (b) Deviation notification report. Submit a deviation report for each compliance determination you make in which the compliance ratio exceeds 1.00 as determined under §63.2840(c). Submit the deviation report by the end of the month following the calendar month in which you determined the deviation. The deviation notification report must include the items in paragraphs (b)(i) through (4) of this section:
- (1) The name and address of the owner or operator.
- (2) The physical address of the vegetable oil production process.
- (3) Each listed oilseed type processed during the 12 operating months period for which you determined the deviation.
- (4) The compliance ratio comprising the deviation. You may reduce the frequency of submittal of the deviation notification report if the agency responsible for these NESHAP does not object as provided in §63.10(e)(3)(iii).
- (c) Periodic startup, shutdown, and malfunction report. If you choose to operate your source under an initial startup period subject to \$63.2850(c)(2) or (d)(2) or a malfunction period subject to \$63.2850(e)(2), you must submit a periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The periodic SSM report must include the items in paragraphs (c)(1) through (3) of this section:
- (1) The name, title, and signature of a source's 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.
- (2) A 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.
- (3) An estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.
- (d) Immediate SSM reports. If you handle a SSM during an initial startup period subject to \$63.2850(c)(2) or (d)(2) or a malfunction period subject to \$63.2850(e)(2) differently from procedures in the SSM plan and the relevant

- emission requirements in §63.2840 are exceeded, then you must submit an immediate SSM report. Immediate SSM reports consist of a telephone call or facsimile transmission to the responsible agency within 2 working days after starting actions inconsistent with the SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the items in paragraphs (d)(1) through (3) of this section:
- (1) The name, title, and signature of a source's responsible official who is certifying the accuracy of the report, an explanation of the event, and the reasons for not following the SSM plan.
- (2) A description and date of the SSM event, its duration, and reason it qualifies as a SSM.
- (3) An estimate of the solvent loss for the duration of the SSM event with supporting documentation.

[66 FR 19011, Apr. 12, 2001, as amended at 67 FR 16321, Apr. 5, 2002]

#### §63.2862 What records must I keep?

- (a) You must satisfy the recordkeeping requirements of this section by the compliance date for your source specified in Table 1 of §63.2834.
- (b) Prepare a plan for demonstrating compliance (as described in §63.2851) and a SSM plan (as described in §63.2852). In these two plans, describe the procedures you will follow in obtaining and recording data, and determining compliance under normal operations or a SSM subject to the §63.2850(c) (2) or (d) (2) initial startup period or the §63.2850(e) (2) malfunction period. Complete both plans before the compliance date for your source and keep them on-site and readily available as long as the source is operational.
- (c) If your source processes any listed ollseed, record the items in paragraphs (c)(1) through (5) of this section:
- (i) For the solvent inventory, record the information in paragraphs (c)(1)(i) through (vii) of this section in accordance with your plan for demonstrating compliance:
- (i) Dates that define each operating status period during a calendar month.

- (ii) The operating status of your source such as normal operation, non-operating, initial startup period, malfunction period, or exempt operation for each recorded time interval.
- (iii) Record the gallons of extraction solvent in the inventory on the beginning and ending dates of each normal operating period.
- (iv) The gallons of all extraction solvent received, purchased, and recovered during each calendar month.
- (v) All extraction solvent inventory adjustments, additions or subtractions. You must document the reason for the adjustment and justify the quantity of the adjustment.
- (vi) The total solvent loss for each calendar month, regardless of the source operating status.
- (vii) The actual solvent loss in gallons for each operating month.
- (2) For the weighted average volume fraction of HAP in the extraction solvent, you must record the items in paragraphs (c)(2)(i) through (iii) of this section:
- (i) The gallons of extraction solvent received in each delivery.
- (ii) The volume fraction of each HAP exceeding 1 percent by volume in each delivery of extraction solvent.
- (iii) The weighted average volume fraction of HAP in extraction solvent received since the end of the last operating month as determined in accordance with §63.2854(b)(2).
- (3) For each type of listed oilseed processed, record the items in paragraphs (c)(3)(i) through (vi) of this section, in accordance with your plan for demonstrating compliance:
- (i) The dates that define each operating status period. These dates must be the same as the dates entered for the extraction solvent inventory.
- (ii) The operating status of your source such as normal operation, non-operating, initial startup period, malfunction period, or exempt operation for each recorded time interval. On the log for each type of listed oilseed that is not being processed during a normal operating period, you must record which type of listed oilseed is being processed in addition to the source operating status.
- (iii) The oilseed inventory for the type of listed oilseed being processed

- on the beginning and ending dates of each normal operating period.
- (iv) The tons of each type of listed oilseed received at the affected source each normal operating period.
- (v) All listed oilseed inventory adjustments, additions or subtractions for normal operating periods. You must document the reason for the adjustment and justify the quantity of the adjustment.
- (vi) The tons of each type of listed oilseed processed during each operating month.
- (d) After your source has processed listed oilseed for 12 operating months, and you are not operating during an initial startup period as described in \$63.2850(c)(2) or (d)(2), or a malfunction period as described in \$63.2850(e)(2), record the items in paragraphs (d)(1) through (5) of this section by the end of the calendar month following each operating month:
- (1) The 12 operating months rolling sum of the actual solvent loss in gallons as described in § 63.2853(c).
- (2) The weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months as described in §63.2854(b)(3).
- (3) The 12 operating months rolling sum of each type of listed oilseed processed at the affected source in tons as described in § 63.2855(c).
- (4) A determination of the compliance ratio. Using the values from §§ 63.2853, 63.2854, 63.2855, and Table 1 of §63.2840, calculate the compliance ratio using Equation 2 of §63.2840.
- (5) A statement of whether the source is in compliance with all of the requirements of this subpart. This includes a determination of whether you have met all of the applicable requirements in §63.2850.
- (e) For each SSM event subject to an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period as described in §63.2850(e)(2), record the items in paragraphs (e)(1) through (3) of this section by the end of the calendar month following each month in which the initial startup period or malfunction period occurred:
- (1) A description and date of the SSM event, its duration, and reason it qualifies as an initial startup or malfunction.

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(2) An estimate of the solvent loss in gallons for the duration of the initial startup or malfunction period with supporting documentation.

supporting documentation.

(3) A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period.

## § 63.2863 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for review in accordance with \$63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, in accordance with §3.10(b)(1). You can keep the records off-site for the remaining 3 years.

OTHER REQUIREMENTS AND INFORMATION

#### § 63.2870 What parts of the General Provisions apply to me?

Table 1 of this section shows which parts of the General Provisions in  $\S 63.1$  through 63.15 apply to you. Table 1 of  $\S 63.2870$  follows:

TABLE 1 OF § 63.2870—APPLICABILITY OF 40 CFR PART 63, SUBPART A, TO 40 CFR, PART 63, SUBPART GGGG

General provisions citation	Subject of citation	Brief description of re- quirement	Applies to sub- part	Explanation
§ 63.1	Applicability	Initial applicability de- termination; applica- bility after standard established; permit requirements; exten- sions; notifications.	Yes	
§ 63.2	Definitions	Definitions for part 63 standards.	Yes	Except as specifically provided in this subpart.
§ 63.3	Units and abbreviations	Units and abbreviations for part 63 standards.	Yes.	'
§ 63.4	Prohibited activities and circumvention.	Prohibited activities; compliance date; cir- cumvention; sever- ability.	Yes	
§ 63.5	struction.	Applicability; applica- tions; approvals.	Yes	Except for subsections of § 63.5 at listed below.
§ 63.5(c)	[Reserved]			
§ 63.5(d)(1)(i)(H)	Application for approval	Type and quantity of HAP, operating pa- rameters.	No	All sources emit HAP. Subper GGGG does not require contro from specific emission points.
§ 63.5(d)(1)(ii)(I)	[Reserved]			
§ 63.5(d)(1)(ii), (d)(2), (d)(3)(ii).		Application for approval	No	The requirements of the application for approval for new, reconstructed and significantly modified and significantly modified sources are described in § 63.2880(b) and (c) of subpar GGGG. General provision requirements for identification of HAP emission points or estimates of actual emissions or not required. Descriptions of control and methods, and the estimated and actual control efficiency of such do not apply. Requirements for describing control equipment and the estimate and actual control efficiency of such equipment apply only is control equipment to which the subpart GGGG requirements for quantifying.
§ 63.6	Applicability of General Provisions.	Applicability	Yes	Except for subsections of § 63.6 a

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TABLE 1 OF § 63.2870—APPLICABILITY OF 40 CFR PART 63, SUBPART A, TO 40 CFR, PART 63, SUBPART GGGG—Continued

SUBPART GGGG—Continued				
General provisions citation	Subject of citation	Brief description of re- quirement	Applies to sub- part	Explanation
\$63.6(b)(1)-(3)	Compliance dates, new and reconstructed sources.		No	Section 63.2834 of subpart GGGG specifies the compliance dates for new and reconstructed sources.
§63.6(b)(6)	[Reserved]		***************************************	
§ 63.6(c)(3)-(4) § 63.6(d)	[Reserved]		***************************************	
§63.6(e)(1) through	[Reserved] Operation and mainte-		Yes	Minimize emissions to the extent
(e)(3)(ii) and § 63.6(a)(3)(v) through (vii),	nance requirements.			practical.
§63.6(e)(3)(iii)	Operation and mainte- nance requirements.	***************************************	No	Minimize emissions to the extent practical
§ 63.6(e)(3)(iv)	Operation and mainta- nance requirements.	***************************************	No	Report SSM and in accordance with § 63.2861(c) and (d).
§ 63.6(e)(3)(viii)	Operation and mainte- nance requirements.		Yes	Except, report each revision to your SSM plan in accordance with §63.2861(c) rether than §63.10(d)(5) as required under §63.6(a)(3) (viii).
§ 63.6(e)(3)(ix)	Title V permit	***************************************	Yes.	
§ 63.6(f)–(g)	Compliance with non- opacity emission standards except during SSM.	Comply with emission standards at all times except during SSM.	No	Subpart GGGG does not have nonopacity requirements.
§ 63.6(h)	Opacity/Visible emis- sion (VE) standards.	11.00.007.001.001.001.001.001.001.001.00	No	Subpart GGGG has no opacity or VE standards.
§ 63.6(i)	Compliance extension	Procedures and criteria for responsible agen- cy to grant compli- ance extension.	Yes	
§ 63.6(j)	Presidential compliance exemption.	President may exempt source category from requirement to com- ply with subpart.	Yes	
§63.7	Performance testing requirements.	Schedule, conditions, notifications and pro- cedures.	Yes	Subpart GGGG requires performance testing only if the source applies additional control that destroys solvent. Saction 63.2850(a)(6) requires sources to follow the performance testing guidelines of the General Provisions if a control is added.
§63.8	Monitoring require- ments.		No	monitoring other than as speci- fled therein.
§ 63.9	Notification require- ments.	Applicability and state delegation.	Yes	listed below.
§ 63.9(b)(2)	Notification require- ments.	Initial notification re- quirements for exist- ing sources.	No	Section 63.2860(a) of subpart GGGG specifies the require- ments of the initial notification for existing sources.
§63.9(b)(3)(5)	Notification require- ments,	Notification requirement for certain new/re-constructed sources.	Yes	Except the Information require- ments differ as described in § 63.2860(b) of subpart GGGG.
§ 63.9(e)	Notification of perform- ance test.	Notify responsible agency 60 days ahead.	Yes	Applies only if performance testing is performed.
§ 63.9(f)	Notification of VE/opac- ity observations.	Notify responsible agency 30 days ahead.	No	Subpart GGGG has no opacity or VE standards.
§ 63.9(g)	Additional notifications when using a continuous monitoring system (CMS).	Notification of performance evaluation; No- tification using COMS data; notifica- tion that exceeded criterion for relative accuracy.	No	Subpart GGGG has no CMS requirements.

#### § 63.2871

TABLE 1 OF § 63.2870—APPLICABILITY OF 40 CFR PART 63, SUBPART A, TO 40 CFR, PART 63, SUBPART GGGG—Continued

General provisions citation	Subject of citation	Brief description of re- quirement	Applies to sub- part	Explanation
§ 63.9(h)	Notification of compli- ance status.	Contents	No	Section 63.2860(d) of subpart GGGG specifies requirements for the notification of compliance status.
§ 63.10	Recordkeeping/report- ing.	Schedule for reporting, record storage.	Yes	Except for subsections of §63.10 as listed below.
§ 63.10(b)(2)(i)	Recordkeeping	Record SSM event	Yes	Applicable to periods when sources must implement their SSM plan as specified in subpart GGGG.
§ 63.10(b)(2)(ii)—(iii)	Recordkeeping	Matfunction of air pollu- tion equipment.	No	Applies only if air pollution control equipment has been added to the process and is necessary for the source to meet the emission limit.
§ 63.10(b)(2)(vi)	Recordkeeping	CMS recordkeeping	No	Subpart GGGG has no CMS re- quirements,
§ 63.10(b)(2)(viii) (ix).	Recordkeeping	Conditions of perform- ance test.	Yes	Applies only if performance tests are performed. Subpart GGGG does not have any CMS opacity or VE observation requirements.
§ 63.10(b)(2)(x)-(xii)	Recordkeeping	CMS, performance testing, and opacity and VE observations record(seeping.	No	Subpart GGGG does not require CMS.
§ 83.10(c)	Recordkeeping	Additional CMS record- keeping.	No	Subpart GGGG does not require CMS.
§63.10(d)(2)	1	Reporting performance test results.	Yes	Applies only if performance testing is performed.
§ 63.10(d)(3)	Reporting	Reporting opacity or VE observations.	No	Subpart GGGG has no opacity or VE standards.
§ 63.10(d)(4)	Reporting	Progress reports	Yes	Applies only if a condition of com- pliance extension exists.
§ 63.10(d)(5)	Reporting		No	Section 63.2861(c) and (d) specify SSM reporting requirements.
§ 63.10(e)	` -	Additional CMS reports	No	Subpart GGGG does not require CMS.
§ 63.11	Control device require- ments.	Requirements for flares	Yes	flare to control solvent emis- sions. Subpart GGGG does not require flares.
§ 63.12	State authority and del- egations.	State authority to en- force standards.	Yes	
§ 63.13	State/regional address- es.	Addresses where re- ports, notifications, and requests are sent.	Yes	
§ 63.14	Incorporation by ref- erence.	Test methods incor- porated by reference.	Yes	
§63.15	Availability of informa- tion and confiden- tiality.	Public and confidential information.	Yes	

[66 FR 19011, Apr. 12, 2001, as amended at 67 FR 16321, Apr. 5, 2002; 71 FR 20463, Apr. 20, 2006]

# § 63.2871 Who implements and enforces this subpart?

(a) This subpart can be implemented by us, the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, as well as the U.S. EPA, has the authority to implement

and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under section 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by

the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are as follows:

(1) Approval of alternative nonopacity emissions standards under §63.6(g).

(2) Approval of alternative opacity standards under § 63.6(h)(9).

(3) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(4) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(5) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

## § 63.2872 What definitions apply to this subpart?

Terms used in this subpart are defined in the sources listed:

(a) The Clean Air Act, section 112(a).
(b) In 40 CFR 63.2, the NESHAP General Provisions.

(c) In this section as follows:

Accounting month means a time interval defined by a business firm during which corporate economic and financial factors are determined on a consistent and regular basis. An accounting month will consist of approximately 4 to 5 calendar weeks and each accounting month will be of approximate equal duration. An accounting month may not correspond exactly to a calendar month, but 12 accounting months will correspond exactly to a calendar year.

Actual solvent loss means the gallons of solvent lost from a source during 12 operating months as determined in accordance with §63.2853.

Agricultural product means any commercially grown plant or plant product.

Allowable HAP loss means the gallons of HAP that would have been lost from a source if the source was operating at the solvent loss factor for each listed oilseed type. The allowable HAP loss in gallons is determined by multiplying the tons of each oilseed type processed during the previous 12 operating months, as determined in accordance with §63.2855, by the corresponding oil-

seed solvent loss factor (gal/ton) listed in Table 1 of §63.2840, and by the dimensionless constant 0.64, and summing the result for all oilseed types processed.

Area source means any source that does not meet the major source definition.

As received is the basis upon which all oilseed measurements must be determined and refers to the oilseed chemical and physical characteristics as initially received by the source and prior to any oilseed handling and processing.

Batch operation means any process that operates in a manner where the addition of raw material and withdrawal of product do not occur simultaneously. Typically, raw material is added to a process, operational steps occur, and a product is removed from the process. More raw material is then added to the process and the cycle repeats.

Calendar month means 1 month as specified in a calendar.

Compliance date means the date on which monthly compliance record-keeping begins. For existing sources, recordkeeping typically begins 3 years after the effective date of the subpart. For new and reconstructed sources, recordkeeping typically begins upon initial startup, except as noted in §63.2834.

Compliance ratio means a ratio of the actual HAP loss in gallons from the previous 12 operating months to an allowable HAP loss in gallons, which is determined by using oilseed solvent loss factors in Table 1 of §63.2840, the weighted average volume fraction of HAP in solvent received for the previous 12 operating months, and the tons of each type of listed oilseed processed in the previous 12 operating months. Months during which no listed oilseed is processed, or months during which the §63.2850(c)(2) or (d)(2) initial startup period or the §63.2850(e)(2) malfunction period applies, are excluded from this calculation. Equation 2 of §63,2840 is used to calculate this value. If the value is less than or equal to 1.00, the source is in compliance. If the value is greater than 1.00, the source is deviating from compliance.

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Continuous operation means any process that adds raw material and withdraws product simultaneously. Mass, temperature, concentration and other properties typically approach steady-state conditions.

Conventional desolventizer means a desolventizer toaster that operates with indirect and direct-contact steam to remove solvent from the extracted meal. Oilseeds processed in a conventional desolventizer produce crude vegetable oil and crude meal products, such as animal feed.

Corn germ dry milling means a source that processes corn germ that has been separated from the other corn components using a "dry" process of mechanical chafing and air sifting.

Corn germ wet milling means a source that processes corn germ that has been separated from other corn components using a "wet" process of centrifuging a

slurry steeped in a dilute sulfurous acid solution.

Exempt period means a period of time during which a source processes agricultural products not defined as listed oilseed.

Extraction solvent means an organic chemical medium used to remove oil from an oilseed. Typically, the extraction solvent is a commercial grade of hexane isomers which have an approximate HAP content of 64 percent by volume.

Hazardous air pollutant (HAP) means any substance or mixture of substances listed as a hazardous air pollutant under section 112(b) of the Clean Air Act, as of April 12, 2001.

Initial startup date means the first calendar day that a new, reconstructed or significantly modified source proc-

esses any listed oilseed.

Initial startup period means a period of time from the initial startup date of a new, reconstructed or significantly modified source, for which you choose to operate the source under an initial startup period subject to §63.2850(c)(2) or (d)(2). During an initial startup period, a source complies with the standards by minimizing HAP emissions to the extent practical. The initial startup period following initial startup of a new or reconstructed source may not exceed 6 calendar months. The initial startup period following a significant

modification may not exceed 3 calendar months. Solvent and oilseed inventory information recorded during the initial startup period is excluded from use in any compliance ratio determinations.

Large cottonseed plant means a vegetable oil production process that processes 120,000 tons or more of cottonseed and other listed oilseed during all normal operating periods in a 12 operating months period used to determine compliance.

Malfunction period means a period of time between the beginning and end of a process malfunction and the time reasonably necessary for a source to correct the malfunction for which you choose to operate the source under a malfunction period subject to §63.2850(e)(2). This period may include the duration of an unscheduled process shutdown, continued operation during a malfunction, or the subsequent process startup after a shutdown resulting from a malfunction. During a malfunction period, a source complies with the standards by minimizing HAP emissions to the extent practical. Therefore, solvent and oilseed inventory information recorded during a malfunction period is excluded from use in any compliance ratio determinations.

Mechanical extraction means removing vegetable oil from oilseeds using only mechanical devices such as presses or screws that physically force the oil from the oilseed. Mechanical extraction techniques use no organic solvents to remove oil from an oilseed.

Nonoperating period means any period of time in which a source processes no agricultural product. This operating status does not apply during any period in which the source operates under an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period, as described in §63.2850(e)(2).

Normal operating period means any period of time in which a source processes a listed oilseed that is not categorized as an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period, as described in §63.2850(e)(2). At the beginning and ending dates of a normal operating period, solvent and oilseed inventory information is recorded and included in the compliance ratio determination.

Ollseed or listed oilseed means the following agricultural products: corn germ, cottonseed, flax, peanut, rapeseed (for example, canola), safflower, soybean, and sunflower.

Oilseed solvent loss factor means a ratio expressed as gallons of solvent loss per ton of oilseed processed. The solvent loss factors are presented in Table 1 of §63.2840 and are used to determine the allowable HAP loss.

Operating month means any calendar or accounting month in which a source processes any quantity of listed oilseed, excluding any entire calendar or accounting month in which the source operated under an initial startup period as described in \$63.2850(c)(2) or (d)(2), or a malfunction period as described in \$63.2850(e)(2). An operating month may include time intervals characterized by several types of operating status. However, an operating month must have at least one normal operating period.

Significant modification means the addition of new equipment or the modification of existing equipment that:
(1) Significantly affects solvent

 Significantly affects solvent losses from your vegetable oil production process;

(2) The fixed capital cost of the new components represents a significant percentage of the fixed capital cost of building a comparable new vegetable oil production process;

(3) The fixed capital cost of the new equipment does not constitute reconstruction as defined in §63.2; and

(4) Examples of significant modifications include replacement of or major changes to solvent recovery equipment such as extractors, desolventizer-toasters/dryer-coolers, flash desolventizers and distillation equipment associated with the mineral oil system, and equipment affecting desolventizing efficiency and steady-state operation of your vegetable oil production process such as flaking mills, oilseed heating and conditioning equipment, and cracking mills.

Small cottonseed plant means a vegetable oil production process that processes less than 120,000 tons of cottonseed and other listed oilseed during all normal operating periods in a 12 operating months period used to determine compliance.

Solvent extraction means removing vegetable oil from listed oilseed using an organic solvent in a direct-contact system.

Solvent working capacity means the volume of extraction solvent normally retained in solvent recovery equipment. Examples include components such as the solvent extractor, desolventizer-toaster, solvent storage and working tanks, mineral oil absorption system, condensers, and oil/solvent distillation system.

Specialty desolventizer means a desolventizer that removes excess solvent from soybean meal using vacuum conditions, energy from superheated solvent vapors, or reduced operating conditions (e.g., temperature) as compared to the typical operation of a conventional desolventizer. Soybeans processed in a specialty desolventizer result in high-protein vegetable meal products for human and animal consumption, such as calf milk replacement products and meat extender products

Vegetable oil production process means the equipment comprising a continuous process for producing crude vegetable oil and meal products, including specialty soybean products, in which oil is removed from listed oilseeds through direct contact with an organic solvent. Process equipment typically includes the following components: oilseed preparation operations (including conditioning, drying, dehulling, and cracking), solvent extractors, desolventizertoasters, meal dryers, meal coolers, meal conveyor systems, oil distillation units, solvent evaporators and condensers, solvent recovery system (also referred to as a mineral oil absorption system), vessels storing solvent-laden materials, and crude meal packaging and storage vessels. A vegetable oil production process does not include vegetable oil refining operations (including operations such as bleaching, hydrogenation, and deodorizing) and operations that engage in additional chemical treatment of crude soybean meals produced in specialty desolventizer units (including operations such as soybean isolate production).

[66 FR 19011, Apr. 12, 2001, as amended at 71 FR 20464, Apr. 20, 2006]

Appendix C CEMS Conditions

# **Arkansas Department of Environmental Quality**



# CONTINUOUS EMISSION MONITORING SYSTEMS CONDITIONS

#### **PREAMBLE**

These conditions are intended to outline the requirements for facilities required to operate Continuous Emission Monitoring Systems/Continuous Opacity Monitoring Systems (CEMS/COMS). Generally there are three types of sources required to operate CEMS/COMS:

- 1. CEMS/COMS required by 40 CFR Part 60 or 63,
- 2. CEMS required by 40 CFR Part 75,
- 3. CEMS/COMS required by ADEQ permit for reasons other that Part 60, 63 or 75.

These CEMS/COMS conditions are not intended to supercede Part 60, 63 or 75 requirements.

- Only CEMS/COMS in the third category (those required by ADEQ permit for reasons other than Part 60, 63, or 75) shall comply with SECTION II, <u>MONITORING REQUIREMENTS</u> and SECTION IV, <u>QUALITY ASSURANCE/QUALITY CONTROL</u>.
- All CEMS/COMS shall comply with Section III, NOTIFICATION AND RECORDKEEPING.

#### **SECTION I**

#### **DEFINITIONS**

Continuous Emission Monitoring System (CEMS) - The total equipment required for the determination of a gas concentration and/or emission rate so as to include sampling, analysis and recording of emission data.

Continuous Opacity Monitoring System (COMS) - The total equipment required for the determination of opacity as to include sampling, analysis and recording of emission data.

Calibration Drift (CD) - The difference in the CEMS output reading from the established reference value after a stated period of operation during which no unscheduled maintenance, repair, or adjustments took place.

**Back-up CEMS** (Secondary CEMS) - A CEMS with the ability to sample, analyze and record stack pollutant to determine gas concentration and/or emission rate. This CEMS is to serve as a back-up to the primary CEMS to minimize monitor downtime.

Excess Emissions - Any period in which the emissions exceed the permit limits.

Monitor Downtime - Any period during which the CEMS/COMS is unable to sample, analyze and record a minimum of four evenly spaced data points over an hour, except during one daily zero-span check during which two data points per hour are sufficient.

Out-of-Control Period - Begins with the time corresponding to the completion of the fifth, consecutive, daily CD check with a CD in excess of two times the allowable limit, or the time corresponding to the completion of the daily CD check preceding the daily CD check that results in a CD in excess of four times the allowable limit and the time corresponding to the completion of the sampling for the RATA, RAA, or CGA which exceeds the limits outlined in Section IV. Out-of-Control Period ends with the time corresponding to the completion of the CD check following corrective action with the results being within the allowable CD limit or the completion of the sampling of the subsequent successful RATA, RAA, or CGA.

Primary CEMS - The main reporting CEMS with the ability to sample, analyze, and record stack pollutant to determine gas concentration and/or emission rate.

Relative Accuracy (RA) - The absolute mean difference between the gas concentration or emission rate determined by the CEMS and the value determined by the reference method plus the 2.5 percent error confidence coefficient of a series of tests divided by the mean of the reference method tests of the applicable emission limit.

Span Value – The upper limit of a gas concentration measurement range.

#### **SECTION II**

#### MONITORING REQUIREMENTS

- A. For new sources, the installation date for the CEMS/COMS shall be no later than thirty (30) days from the date of start-up of the source.
- B. For existing sources, the installation date for the CEMS/COMS shall be no later than sixty (60) days from the issuance of the permit unless the permit requires a specific date.
- C. Within sixty (60) days of installation of a CEMS/COMS, a performance specification test (PST) must be completed. PST's are defined in 40 CFR, Part 60, Appendix B, PS 1-9. The Department may accept alternate PST's for pollutants not covered by Appendix B on a case-by-case basis. Alternate PST's shall be approved, in writing, by the ADEQ CEM Coordinator prior to testing.
- D. Each CEMS/COMS shall have, as a minimum, a daily zero-span check. The zero-span shall be adjusted whenever the 24-hour zero or 24-hour span drift exceeds two times the limits in the applicable performance specification in 40 CFR, Part 60, Appendix B. Before any adjustments are made to either the zero or span drifts measured at the 24-hour interval the excess zero and span drifts measured must be quantified and recorded.
- E. All CEMS/COMS shall be in continuous operation and shall meet minimum frequency of operation requirements of 95% up-time for each quarter for each pollutant measured. Percent of monitor down-time is calculated by dividing the total minutes the monitor is not in operation by the total time in the calendar quarter and multiplying by one hundred. Failure to maintain operation time shall constitute a violation of the CEMS conditions.
- F. Percent of excess emissions are calculated by dividing the total minutes of excess emissions by the total time the source operated and multiplying by one hundred. Failure to maintain compliance may constitute a violation of the CEMS conditions.
- G. All CEMS measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive fifteen minute period unless more cycles are required by the permit. For each CEMS, one-hour averages shall be computed from four or more data points equally spaced over each one hour period unless more data points are required by the permit.
- H. All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- I. When the pollutant from a single affected facility is released through more than one point, a CEMS/COMS shall be installed on each point unless installation of fewer systems is approved, in writing, by the ADEQ CEM Coordinator. When more than one CEM/COM is used to monitor emissions from one affected facility the owner or operator shall report the results as required from each CEMS/COMS.

#### SECTION III

#### NOTIFICATION AND RECORD KEEPING

- A. When requested to do so by an owner or operator, the ADEQ CEM Coordinator will review plans for installation or modification for the purpose of providing technical advice to the owner or operator.
- B. Each facility which operates a CEMS/COMS shall notify the ADEQ CEM Coordinator of the date for which the demonstration of the CEMS/COMS performance will commence (i.e. PST, RATA, RAA, CGA). Notification shall be received in writing no less than 15 days prior to testing. Performance test results shall be submitted to the Department within thirty days after completion of testing.
- C. Each facility which operates a CEMS/COMS shall maintain records of the occurrence and duration of start up/shut down, cleaning/soot blowing, process problems, fuel problems, or other malfunction in the operation of the affected facility which causes excess emissions. This includes any malfunction of the air pollution control equipment or any period during which a continuous monitoring device/system is inoperative.
- D. Except for Part 75 CEMs, each facility required to install a CEMS/COMS shall submit an excess emission and monitoring system performance report to the Department (Attention: Air Division, CEM Coordinator) at least quarterly, unless more frequent submittals are warranted to assess the compliance status of the facility. Quarterly reports shall be postmarked no later than the 30th day of the month following the end of each calendar quarter. Part 75 CEMs shall submit this information semi-annually and as part of Title V six (6) month reporting requirement if the facility is a Title V facility.
- E. All excess emissions shall be reported in terms of the applicable standard. Each report shall be submitted on ADEQ Quarterly Excess Emission Report Forms. Alternate forms may be used with prior written approval from the Department.
- F. Each facility which operates a CEMS/COMS must maintain on site a file of CEMS/COMS data including all raw data, corrected and adjusted, repair logs, calibration checks, adjustments, and test audits. This file must be retained for a period of at least five years, and is required to be maintained in such a condition that it can easily be audited by an inspector.
- G. Except for Part 75 CEMs, quarterly reports shall be used by the Department to determine compliance with the permit. For Part 75 CEMs, the semi-annual report shall be used.

#### **SECTION IV**

#### QUALITY ASSURANCE/QUALITY CONTROL

- A. For each CEMS/COMS a Quality Assurance/Quality Control (QA/QC) plan shall be submitted to the Department (Attn.: Air Division, CEM Coordinator). CEMS quality assurance procedures are defined in 40 CFR, Part 60, Appendix F. This plan shall be submitted within 180 days of the CEMS/COMS installation. A QA/QC plan shall consist of procedure and practices which assures acceptable level of monitor data accuracy, precision, representativeness, and availability.
- B. The submitted QA/QC plan for each CEMS/COMS shall not be considered as accepted until the facility receives a written notification of acceptance from the Department.
- C. Facilities responsible for one, or more, CEMS/COMS used for compliance monitoring shall meet these minimum requirements and are encouraged to develop and implement a more extensive QA/QC program, or to continue such programs where they already exist. Each QA/QC program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:
  - 1. Calibration of CEMS/COMS
    - a. Daily calibrations (including the approximate time(s) that the daily zero and span drifts will be checked and the time required to perform these checks and return to stable operation)
  - 2. Calibration drift determination and adjustment of CEMS/COM\$
    - a. Out-of-control period determination
    - b. Steps of corrective action
  - 3. Preventive maintenance of CEMS/COMS
    - a. CEMS/COMS information
      - 1) Manufacture
      - 2) Model number
      - 3) Serial number
    - b. Scheduled activities (check list)
    - c. Spare part inventory
  - 4. Data recording, calculations, and reporting
  - 5. Accuracy audit procedures including sampling and analysis methods
  - 6. Program of corrective action for malfunctioning CEMS/COMS
- D. A Relative Accuracy Test Audit (RATA), shall be conducted at least once every four calendar quarters. A Relative Accuracy Audit (RAA), or a Cylinder Gas Audit (CGA), may be conducted in the other three quarters but in no more than three quarters in succession. The RATA should be conducted in accordance with the applicable test procedure in 40 CFR Part 60 Appendix A and calculated in accordance with the applicable performance specification in 40 CFR Part 60 Appendix B. CGA's and RAA's should be conducted and the data calculated in accordance with the procedures outlined on 40 CFR Part 60 Appendix F.

If alternative testing procedures or methods of calculation are to be used in the RATA, RAA or CGA audits prior authorization must be obtained from the ADEQ CEM Coordinator.

## E. Criteria for excessive audit inaccuracy.

#### **RATA**

MAIA				
All Pollutants except Carbon Monoxide	> 20% Relative Accuracy			
Carbon Monoxide	> 10% Relative Accuracy			
All Pollutants except Carbon Monoxide	> 10% of the Applicable Standard			
Carbon Monoxide	> 5% of the Applicable Standard			
Diluent (O <sub>2</sub> & CO <sub>2</sub> )	> 1.0 % O2 or CO2			
Flow	> 20% Relative Accuracy			

### **CGA**

	> 15% of average audit value or 5 ppm difference
Diluent (O <sub>2</sub> & CO <sub>2</sub> )	> 15% of average audit value or 5 ppm difference

#### **RAA**

Pollutant	> 15% of the three run average or > 7.5 % of the applicable standard
Diluent (O <sub>2</sub> & CO <sub>2</sub> )	> 15% of the three run average or > 7.5 % of the applicable standard

- F. If either the zero or span drift results exceed two times the applicable drift specification in 40 CFR, Part 60, Appendix B for five consecutive, daily periods, the CEMS is out-of-control. If either the zero or span drift results exceed four times the applicable drift specification in Appendix B during a calibration drift check, the CEMS is out-of-control. If the CEMS exceeds the audit inaccuracies listed above, the CEMS is out-of-control. If a CEMS is out-of-control, the data from that out-of-control period is not counted towards meeting the minimum data availability as required and described in the applicable subpart. The end of the out-of-control period is the time corresponding to the completion of the successful daily zero or span drift or completion of the successful CGA, RAA or RATA.
- G. A back-up monitor may be placed on an emission source to minimize monitor downtime. This back-up CEMS is subject to the same QA/QC procedure and practices as the primary CEMS. The back-up CEMS shall be certified by a PST. Daily zero-span checks must be performed and recorded in accordance with standard practices. When the primary CEMS goes down, the back-up CEMS may then be engaged to sample, analyze and record the emission source pollutant until repairs are made and the primary unit is placed back in service. Records must be maintained on site when the back-up CEMS is placed in service, these records shall include at a minimum the reason the primary CEMS is out of service, the date and time the primary CEMS was out of service and the date and time the primary CEMS was placed back in service.

Appendix D

40 CFR 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

following the end of the reporting period.

- (x) Facility-specific NO<sub>x</sub> standard for Weyerhaeuser Company's No. 2 Power Boiler located in New Bern, North Carolina:
- (1) Standard for nitrogen oxides. (i) When fossil fuel alone is combusted, the  $NO_X$  emission limit for fossil fuel in  $\S60.44b(a)$  applies.
- (ii) When fossil fuel and chemical by-product waste are simultaneously combusted, the  $NO_X$  emission limit is 215 ng/J (0.5 lb/MMBtu).
- (2) Emission monitoring for nitrogen oxides. (1) The NO<sub>X</sub> emissions shall be determined by the compliance and performance test methods and procedures for NO<sub>X</sub> in §60.46b.
- (ii) The monitoring of the  $NO_X$  emissions shall be performed in accordance with  $\S 60.48b$ .
- (3) Reporting and recordkeeping requirements. (1) The owner or operator of the No. 2 Power Boiler shall submit a report on any excursions from the limits required by paragraph (x)(2) of this section to the Administrator with the quarterly report required by \$60.49b(i).
- (ii) The owner or operator of the No. 2 Power Boiler shall keep records of the monitoring required by paragraph (x)(3) of this section for a period of 2 years following the date of such record.
- (iii) The owner or operator of the No. 2 Power Boiler shall perform all the applicable reporting and recordkeeping requirements of § 60.49b.
- (y) Facility-specific NO<sub>x</sub> standard for INEOS USA's AOGI located in Lima, Ohio:
- (1) Standard for  $NO_X$ . (1) When fossil fuel alone is combusted, the  $NO_X$  emission limit for fossil fuel in §60.44b(a) applies,
- (ii) When fossil fuel and chemical by-product/waste are simultaneously combusted, the NO<sub>x</sub> emission limit is 645 ng/J (1.5 lb/MMBtu).
- (2) Emission monitoring for  $NO_X$ . (i) The  $NO_X$  emissions shall be determined by the compliance and performance test methods and procedures for  $NO_X$  in §60.46b.
- (ii) The monitoring of the  $NO_X$  emissions shall be performed in accordance with §60.48b.
- (3) Reporting and recordkeeping requirements. (i) The owner or operator of

the AOGI shall submit a report on any excursions from the limits required by paragraph (y)(2) of this section to the Administrator with the quarterly report required by paragraph (i) of this section.

- (ii) The owner or operator of the AOGI shall keep records of the monitoring required by paragraph (y)(3) of this section for a period of 2 years following the date of such record.
- (iii) The owner or operator of the AOGI shall perform all the applicable reporting and recordkeeping requirements of this section.

#### Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Source: 72 FR 32759, June 13, 2007, unless otherwise noted.

# § 60.40c Applicability and delegation of authority.

- (a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).
- (b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.
- (c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO<sub>2</sub>) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.
- (d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

#### \$60.41c

(e) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart GG or KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/hr) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this

(f) Any facility covered by subpart AAAA of this part is not covered by

this subpart.

(g) Any facility covered by an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not covered by this subpart.

#### § 60.41c Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in

subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of cre-

ating useful heat, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and develop ment, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (i.e., the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (Incorporated by reference, see §60.17).

Dry flue gas desulfurization technology means a SO<sub>2</sub> control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the

combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO<sub>2</sub> control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under \$60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means: (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see § 60.17).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical  $SO_2$  emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system.

This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Wet flue gas desulfurization technology means an SO<sub>2</sub> control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO<sub>2</sub>.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

# § 60.42c Standard for sulfur dioxide $(SO_2)$ .

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO<sub>2</sub> emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain  $SO_2$  in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential  $SO_2$  emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain  $SO_2$  in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that:

(i) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither:

(1) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO<sub>2</sub> emission rate (80 percent reduction); nor

- (ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SQ<sub>2</sub> in excess of SQ<sub>2</sub> in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except:coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat input SQ<sub>2</sub> emissions limit or the 90 percent SQ<sub>2</sub> reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.
- (2) Combusts only coal and that uses an emerging technology for the control of SO<sub>2</sub> emissions shall neither:
- (i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 50 percent (0.50) of the potential SO<sub>2</sub> emission rate (50 percent reduction); nor
- (ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50

percent  $SO_2$  reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).

(1) Affected facilities that have a heat input capacity of 22 MW (75

MMBtu/hr) or less.

(2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.

(3) Affected facilities located in a noncontinental area.

(4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

(d) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 215 ng/J (0.50 lb/MMBtu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applica-

ble to affected facilities under this

paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of the following:

(i) The percent of potential SO<sub>2</sub> emission rate or numerical SO<sub>2</sub> emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for

any affected facility that

(i) Combusts coal in combination with any other fuel;

(ii) Has a heat input capacity greater than 22 MW (75 MMBtu/hr); and

(iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_{s} = \frac{(K_{a}H_{a} + K_{b}H_{b} + K_{c}H_{c})}{(H_{a} + H_{b} + H_{c})}$$

Where

E<sub>s</sub> = SO<sub>2</sub> emission limit, expressed in ng/J or lb/MMBtu heat input;

 $K_* = 520 \text{ ng/J (1.2 lb/MMBtu)};$ 

 $K_b = 260 \text{ ng/J } (0.60 \text{ lb/MMBtu});$ 

 $K_a = 215 \text{ ng/J} (0.50 \text{ lb/MMBtu});$ 

H<sub>a</sub> = Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu]:

H<sub>b</sub> = Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

H<sub>o</sub>  $K_{\bullet}H_{b}$  = Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential  $SO_2$  emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential  $SO_2$  emission rate; and

#### §60.43c

(2) Emissions from the pretreated (without either combustion or post-combustion SO2 control) are equal to or less than the emission limits specified under paragraph (b)(2) of this

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a

30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(i), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as

(i) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

- (2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).
- (3) Coal-fired facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).
- (i) The SO<sub>2</sub> emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.
- (j) Only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

# § 60.43c Standard for particulate mat-ter (PM).

(a) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first. no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(b) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

(i) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood greater than

30 percent (0.30); or

(2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood

of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

(d) The PM and opacity standards under this section apply at all times. except during periods of startup, shut-down, or malfunction.

(e)(1) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.

(2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of

both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels: and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/ MMBtu) heat input.

(4) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first. an owner or operator of an affected facility that commences construction. reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under §60.43c and not using a postcombustion technology (except a wet scrubber) to reduce PM or SO<sub>2</sub> emissions is not subject to the PM limit in this section.

#### § 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

(a) Except as provided in paragraphs (g) and (h) of this section and §60.8(b), performance tests required under §60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(b) The initial performance test required under §60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO<sub>2</sub> emission limits under §60.42c shall be determined using a 30day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) of this section and §60.8, compliance with the percent reduction requirements and SO2 emission limits under \$60.42c is based on the average percent reduction and the average SO2 emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO2 emission rate are calculated to show compliance with the

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to determine the hourly SO2 emission rate (Ebo) and the 30-day average SO<sub>2</sub> emission rate (E<sub>so</sub>). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate Eao when using daily fuel sampling or Method 6B of appendix A of this part.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted Eho (Ehoo) is used in Equation 19-19 of Method 19 of appendix A of this part to compute the adjusted Ear (Earo). The Eboo is computed using the following formula:

$$E_{ho}o = \frac{E_{ho} - E_w (1 - X_k)}{X_k}$$

Where:

 $E_{bo}o = Adjusted E_{bo}$ , ng/J (lb/MMBtu); Ebo = Hourly SO2 emission rate, ng/J (1b/ MMBtu);

 $E_w = SO_2$  concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value E, for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure Ew if the owner or operator elects to assume

= Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this

(2) The owner or operator of an affected facility that qualifies under the provisions of §60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters E. or Xk if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under §60.42c(a) or (b) shall determine compliance with the SO<sub>2</sub> emission limits under §60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO2 emission rate is computed using the following formula:

$$%P_s = 100 \left(1 - \frac{%R_g}{100}\right) \left(1 - \frac{%R_f}{100}\right)$$

Where:

 $%P_{a}$  = Potential SO<sub>2</sub> emission rate, in per-

%Rs = SO2 removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and the SQ removal efficiency of fuel pretreatment as determined by Method

19 of appendix A of this part, in percent.

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(i) of this section are used, except as provided for in the following:

(i) To compute the %Ps, an adjusted  $%R_g$  ( $%R_g$ 0) is computed from  $E_{a0}$ 0 from paragraph (e)(1) of this section and an adjusted average SO2 inlet rate (Eaio) using the following formula:

$$R_{go} = 100 \left( 1 - \frac{E_{so}^{o}}{E_{si}^{o}} \right)$$

Where:

 $R_{go}$  = Adjusted  $R_{g}$ , in percent: E<sub>100</sub> = Adjusted E<sub>10</sub>, ng/J (lb/MMBtu); and Eno - Adjusted average SO2 inlet rate, ng/J (lb/MMBtu).

(ii) To compute Eajo, an adjusted hourly SO2 inlet rate (Ehio) is used. The Enio is computed using the following

$$E_{hi}o = \frac{E_{hi} - E_{w} \left(1 - X_{k}\right)}{X_{k}}$$

 $\begin{array}{l} E_{\rm hi}o = Adjusted \; E_{\rm bi}, \; ng/J \; (lb/MMBtu); \\ E_{\rm bi} = Hourly \; SO_2 \; inlet \; rate, \; ng/J \; (lb/MMBtu); \\ E_w = SO_2 \; concentration \; in \; fuels \; other \; than \end{array}$ coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value E<sub>w</sub> for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure Ew if the owner or operator elects to assume

= Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under §60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under § 60.46c(d) (2).

(h) For affected facilities subject to §60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, the per-formance test shall consist of the certification, the certification from the fuel supplier, as described under

§60.48c(f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the  $SO_2$  standards under  $\S 60.42c(c)(2)$  shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested

at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be

(j) The owner or operator of an affected facility shall use all valid SO2 emissions data in calculating %P, and E<sub>ho</sub> under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under §60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating %P, or Ebo pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

#### § 60.45c Compliance and performance test methods and procedures for particulate matter.

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under §60.43c shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section.

(1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse

sampling points.

(2) Method 3 of appendix A of this part shall be used for gas analysis when applying Method 5, 5B, or 17 of appendix A of this part.

(3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part may be used only at affected fa-cilities without wet scrubber systems.

(ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C

(320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part may be used in conjunction with a

wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained

at 160 ±14 °C (320±25 °F).

(6) For determination of PM emissions, an oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined

using:

(i) The O<sub>2</sub> or CO<sub>2</sub> measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(8) Method 9 of appendix A of this part (6-minute average of 24 observations) shall be used for determining the

opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under \$60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the

initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(c) In place of PM testing with EPA Reference Method 5, 5B, or 17 of appendix A of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using EPA Method 5, 5B, or 17 of appendix A of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(13) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with § 60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under \$60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under \$60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using

EPA Reference Method 19 of appendix A of this part, section 4.1.

- (6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.
- (7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (d)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.
- (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
  - (ii) [Reserved]
- (8) The 1-hour arithmetic averages required under paragraph (d)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.
- (9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (d) (7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

- (11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and  $O_2$  (or  $CO_2$ ) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraph (d) (7) (i) of this section.
- (i) For PM, EPA Reference Method 5, 5B, or 17 of appendix A of this part shall be used.
- (ii) For O<sub>2</sub> (or CO<sub>2</sub>), EPA reference Method 3, 3A, or 3B of appendix A of this part, as applicable shall be used.
- (12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

(d) The owner or operator of an affected facility seeking to demonstrate compliance under §60.43c(e)(4) shall follow the applicable procedures under §60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/hr).

#### § 60.46c Emission monitoring for sulfur dioxide.

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO<sub>2</sub> emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring  $SO_2$  concentrations and either  $O_2$  or  $CO_2$  concentrations at the outlet of the SO<sub>2</sub> control device (or the outlet of the steam generating unit if no SO<sub>2</sub> control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under §60.42c shall measure SO2 concentrations and either O2 or CO2 concentrations at both the inlet and outlet of the SO<sub>2</sub> control device.

(b) The 1-hour average SO<sub>2</sub> emission rates measured by a CEMS shall be expressed in ng/J or 1b/MMBtu heat input and shall be used to calculate the average emission rates under §60.42c. Each 1-hour average SO<sub>2</sub> emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under §60.13(h)(2). Hourly SO<sub>2</sub> emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

- (1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.
- (2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.
- (3) For affected facilities subject to the percent reduction requirements under \$60.42c, the span value of the SO<sub>2</sub> CEMS at the inlet to the SO<sub>2</sub> control device shall be 125 percent of the maximum estimated hourly potential SO<sub>2</sub> emission rate of the fuel combusted, and the span value of the SO<sub>2</sub> CEMS at the outlet from the SO<sub>2</sub> control device shall be 50 percent of the maximum estimated hourly potential SO<sub>2</sub> emission rate of the fuel combusted.
- (4) For affected facilities that are not subject to the percent reduction requirements of \$60.42c, the span value of the  $SO_2$  CEMS at the outlet from the  $SO_2$  control device (or outlet of the steam generating unit if no  $SO_2$  control device is used) shall be 125 percent of the maximum estimated hourly potential  $SO_2$  emission rate of the fuel combusted.
- (d) As an alternative to operating a CEMS at the inlet to the SO<sub>2</sub> control device (or outlet of the steam generating unit if no SO2 control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO<sub>2</sub> emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO2 control device (or outlet of the steam generating unit if no SO2 control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO<sub>2</sub> emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.
- (1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content

- and heat content according the Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO<sub>2</sub> input rate.
- (2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.
- (3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO<sub>2</sub> at the inlet or outlet of the SO<sub>2</sub> control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable SO<sub>2</sub> and CO<sub>2</sub> measurement train operated at the candidate location and a second similar train operated according to the procedures in §3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the

stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to §60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, as described

under §60.48c(f), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

# § 60.47c Emission monitoring for par-ticulate matter.

(a) Except as provided in paragraphs (c), (d), (e), and (f) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under §60.43c shall install, calibrate, maintain, and operate a COMS for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system.

(b) All COMS for measuring opacity shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and

80 percent.

(c) Affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J

(0.06 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO<sub>2</sub> or PM emissions are not required to operate a CEMS for measuring opacity if they follow the applicable procedures under

§60.48c(f).

(d) Owners or operators complying with the PM emission limit by using a PM CEMS monitor instead of monitoring opacity must calibrate, maintain, and operate a CEMS, and record the output of the system, for PM emissions discharged to the atmosphere as specified in § 60.45c(d). The CEMS specified in paragraph §60.45c(d) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span ad-

justments.

(e) An affected facility that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO<sub>2</sub>, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS for measuring opacity. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section.
(1) You must monitor CO emissions

using a CEMS according to the procedures specified in paragraphs (e)(1)(i)

through (iv) of this section.

(i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.

(ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. At least two data points per hour must

be used to calculate each 1-hour aver-

(iv) Quarterly accuracy determina-tions and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appen-

dix F of this part.

(2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and di-vided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourl CO emission levels computed for each steam generating unit operating day.

(3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the

corrective action.

(f) An affected facility that burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the appropriate delegated permitting authority is not required to operate a COMS for measuring opacity. This monitoring plan must include procedures and criteria for establishing and monitoring spe-cific parameters for the affected facility indicative of compliance with the opacity standard.

#### §60.48c Reporting and recordkeeping requirements.

- (a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include:
- (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
- (2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c. or § 60.43c.
- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
- (4) Notification if an emerging technology will be used for controlling SO2 emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.
- (b) The owner or operator of each affected facility subject to the SO2 emission limits of §60.42c, or the PM or opacity limits of §60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.
- (c) The owner or operator of each coal-fired, oil-fired, or wood-fired affected facility subject to the opacity limits under §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period.

- (d) The owner or operator of each affected facility subject to the  $SO_2$  emission limits, fuel oil sulfur limits, or percent reduction requirements under \$60.42c\$ shall submit reports to the Administrator.
- (e) The owner or operator of each affected facility subject to the  $SO_2$  emission limits, fuel oil sulfur limits, or percent reduction requirements under \$60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

- (2) Each 30-day average SO<sub>2</sub> emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
- (3) Each 30-day average percent of potential  $SO_2$  emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.
- (4) Identification of any steam generating unit operating days for which SO<sub>2</sub> or diluent (O<sub>2</sub> or CO<sub>2</sub>) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.
- (5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.
- (6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.
- (7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.
- (8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

- (9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.
- (10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.
- (11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certifled statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier;

- (ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and
- (iii) The sulfur content of the oil.

(2) For residual oil:

(i) The name of the oil supplier;

- (ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;
- (iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and
- (iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at

the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(4) For other fuels:

(i) The name of the supplier of the fuel:

(ii) The potential sulfur emissions rate of the fuel in ng/J heat input; and (iii) The method used to determine

the potential sulfur emissions rate of the fuel.

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

- (2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in \$60.48c(f) to demonstrate compliance with the SO<sub>2</sub> standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.
- (3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in §60.42C to use fuel certification to demonstrate compliance with the SO<sub>2</sub> standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each

steam generating unit fuel delivered to that property during each calendar month.

- (h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under §60.42c or §60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the cal-
- (i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.
- (j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

#### Subpart E-Standards of Performance for Incinerators

# §60.50 Applicability and designation of affected facility.

- (a) The provisions of this subpart are applicable to each incinerator of more than 45 metric tons per day charging rate (50 tons/day), which is the affected facility.
- (b) Any facility under paragraph (a) of this section that commences construction or modification after August 17, 1971, is subject to the requirements of this subpart.
- (c) Any facility covered by subpart Cb, Eb, AAAA, or BBBB of this part is not covered by this subpart.
- (d) Any facility covered by an EPA approved State section 111(d)/129 plan implementing subpart Cb or BBBB of this part is not covered by this subpart.
- (e) Any facility covered by subpart FFF or JJJ of part 62 of this title (Federal section 111(d)/129 plan implementing subpart Cb or BBBB of this part) is not covered by this subpart.

[42 FR 37936, July 25, 1977, as amended at 71 FR 27335, May 10, 2006]

# **CERTIFICATE OF SERVICE**

I, Pam Owen, hereby cert	ify that a copy	of this permit has been mailed by first class mail to	
Riceland Foods, Inc So	y Division, P.C	).Box 927, Stuttgart, AR, 72160, on this	
and	day of	Ebruary, 2011.	
		Ø	
•		Tem Owen	
		Pam Owen, AAII, Air Division	